Philippine Normal University

The National Center for Teacher Education

Institute of Teaching and Learning

MY PERSONAL GROWTH AND PROFESSIONAL DEVELOPMENT PORTFOLIO
PRACTICE TEACHING 1

Submitted by:

Joanabelle C. Zita

IV-18 Bachelor in Mathematics Education

Submitted to:

Prof. Rolando Decella

A.Y. 2017-2018

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Introduction

After ten terms of academic coursework, this marks the start of having real-life experiences in teaching venture. This is where the teaching and learning theories are applied in the actual classroom setting. In every experience that I have in teaching, there is a realization that I got and based on those realizations, a stand will came up which it will be remembered as I go through the teaching profession.

This portfolio contains my experiences and realizations in teaching, as well as my plans in my teaching venture.

The preliminary part includes all my practice teaching forms that we need to accomplish before having our on-campus teaching, as well as my attendance in the entire term.

The first part is my curriculum vitae wherein this sums up my background as a student.

The second part is the log of activities wherein my significant experiences were listed and categorized according to the seven domains of the Philippine Professional Standards for Teachers (PPST).

The third part is my reflections in each domain of the PPST. This includes the strands stated in each domain, my reflection based on my experiences related on the given domain and the evidences of my experiences, including the practice teaching forms that every practice teacher must accomplish before and on the duration of our on-campus practice teaching. The practice teaching forms includes our application, perceptions and philosophies, professional readings, reflective journals, observation guide and case study.

Lastly, my overall reflection was included based on my reflections on the seven domains, as well as my philosophy in teaching and learning. This sums up my experiences in my on-campus practice teaching.

Math-ography

On the 31st of July 1997, Joanabelle Cayaban Zita was born in Manila. She is the youngest among the three children of a retired seafarer and a housewife. She grew up and is currently living in a suburban area of San Mateo, Rizal.

She pursued her early and basic education at Nuestra Señora de Aranzazu Parochial School in Rizal while she is pursuing her Bachelor's degree in Mathematics Education at Philippine Normal University. Being a diligent and passionate student, Joanabelle become a consistent top achiever. She is a scholar from high school to college. In her years as a student, she became a tutor in various levels, a research presenter in different events, a volunteer in community extensions and participant in a variety of seminars, forums and talks.

Aside from her passion in studying, she is also an active church server, a member of the Ministry of Lectors at San Jose de Ampid Parish.

Her personal interests include mathematics, mathematics education, music, travel, food and adventure. In the field of education, her interests include instructional materials development, assessment and evaluation.

Republic of the Philippines
Philippine Normal University
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INSTITUTE OF TEACHING AND LEARNING
Manila

APPLICATION FOR PRACTICE TEACHING (PROF. ED. 15)

Practice Teaching Form 1

Maria Ruth M. Regalado

Director

Madam:

I would like to apply for Practice Teaching this **2nd** term, **2nd to 3rd** quarter, school year **2017-2018**.

The attached Checklist of Grades from PWEBBS certifies that I am ready for this. Furthermore, I assure the department that this is the course I would enroll on for this period/term.

For the interest of the training program and in accordance with certain policies of division superintendents, I may be assigned to any school recommended by the cooperating division office. I hereby express no objection to this.

Very truly yours,

Joanabelle C. Zita

Curriculum_OBTEC___Year & Section IV-18 BME_____

Permanent Address Lot 3A Blk. 4 Genesis St. Felicidad Village II Gulod Malaya San Mateo, Rizal

Provincial Address *(same as the permanent address)*

Tel # 2129417__ Mobile No. 09268318892__

Recommended:

Gladys C. Nivera, PhD

Faculty of Science, Technology and Mathematics

Conforme:

Josefina C. Zita

Parent

Date Submitted: _____

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Manila

Practice Teaching Form 2

Practice Teacher Personal Profile

Name _Joanabelle Cayaban Zita_____ Course/Section/Major _IV-18 BME_____

City Address _____Lot 3A Blk. 4 Genesis St. Felicidad Village II Gulod Malaya San Mateo, Rizal

Date of Birth __July 31, 1997_____ Age as of last birthday ___20_____

Parents: Father _Abel D, Zita_____ Occupation ___none (retired)_____

Mother _Josefina C. Zita_____ Occupation _Housewife_____

Guardian __n/a_____ Occupation __n/a_____

(if not living w/parents)

Contact No. Landline: _2129417_ Mobile: __09268318892____ E-mail: _zita.jc@pnu.edu.ph_

Reason(s) for taking up Education as a course:

Taking up Education as a course gives me opportunities to inspire people through sharing my passion in mathematics.

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Practice Teaching Form 5

Perceived Fears/Problems of Practicum Students

Here are statements that indicate the most common fears/problems of beginning student teachers. Identify your own fears/problems and rate each using this scale.

4 = worry about this to a large extent

3 = worry about this to a moderate extent

2 = worry about this to a little extent

1 = not worried about this

Items	4	3	2	1
A. Acceptance by				
1. Learners				☑
2. CTs				☑
3. School Administrator				☑
4. School Staff				☑
B. Adequacy				☑
1. knowledge of subject matter			☑	
2. knowledge of teaching strategies			☑	
3. knowledge of planning actual instruction			☑	
4. knowledge of media and resources				☑
5. instruction skills (English, oral and written)				☑
C. Ability to				☑
1. teach with CTs/CSs around				☑
2. teach with other observers around			☑	
3. mange classroom/classroom control			☑	
4. show of flexibility			☑	
5. establish self as teacher especially when CT is out			☑	
6. communicate/articulate ideas and feelings/fears			☑	
7. presents ideas effectively			☑	
8. accepts criticisms/feedbacks			☑	
9. use of media resources			☑	
10. arrange time and schedule			☑	
11. responds to students			☑	
12. apply teaching principles		☑		
13. maintain appropriate class record			☑	
14. learn names of students		☑		
15. project voice appropriately			☑	
16. use of appropriate, neat, and legible handwriting			☑	
D. High quality relationship with			☑	
1. other PS's				☑
2. other teachers				☑
3. school principals				☑
4. school staff		☑		
E. Dealing with complex issues concerning			☑	
1. special needs of students			☑	
2. mixed-ability classes			☑	
3. evaluation of student performance			☑	

Submitted by: Joanabelle C. Zita Date: September 28, 2017 Year & Section IV-18 BME

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Manila

Practice Teaching Form 6

PT Perceptions/Expectations

A. Perceptions

Practice teaching is where I will apply all what I've learned in ten terms of academic coursework. This is where I will see the learned teaching and learning theories in the classroom setting as well as the development of the learners. This will test whether the teaching profession is suitable for me or not.

B. Expectations

1. From Self (What you expect to do)
   From myself, I expect to give my best to let my students learn as much as possible and enjoy their mathematics classes with me.

2. From CS
   I expect that he will help me to improve my teaching through giving frequent feedbacks, constructive criticisms, strengths & areas of improvement, and giving advice as I go through the teaching profession.

3. From PT Program
   I expect that I can teach as frequently as possible, have more realistic experiences beyond teaching such as organizing school events, having seminars as we go through teaching, having mentored, etc.

C. Do you feel emotionally ready and confident to teach this term?
I do feel emotionally ready and confident to teach this term.

D. What is your Commitment to the teaching profession?
My commitment to the teaching profession is my dedication to share my passion in mathematics to my students.

Submitted by: Joanabelle C. Zita Date: September 28, 2017 Year & Section IV-18 BME

Attendance

October 2017				
Monday	Tuesday	Wednesday	Thursday	Friday
2	3	4	5	6
9	10	11	12	13
16	17	18	19	20
23	24	25	26	27

November 2017				
Monday	Tuesday	Wednesday	Thursday	Friday
6	7	8	9	10
13	14	15	16	17
20	21	22	23	24
27	28	29	30	

December 2017				
Monday	Tuesday	Wednesday	Thursday	Friday
				1
4	5	6	7	8
11	12	13	14	15
18	19	20	21	22

Legend

	Present		Absent		Excused		No Meeting

JOANABELLE CAYABAN ZITA

Lot 3A Blk. 4 Genesis St. Felicidad Village II Gulod Malaya

San Mateo Rizal

2129417/09268318892

zita.jc@pnu.edu.ph

OBJECTIVE

Utilize my skills in content & pedagogical knowledge and grow professionally as a pre-service teacher through teaching junior high school students

PERSONAL INFORMATION

Full Name:	Joanabelle Cayaban Zita
Date of Birth:	July 31, 1997
Gender:	Female
Nationality:	Filipino
Languages spoken:	Filipino, American English
Marital Status:	Single
Religion:	Roman Catholic
Skills:	Speak in Mandarin and Bahasa Indonesia, sing, play musical instruments (piano, flute, guitar and violin), write flash fiction stories, formulate math problems

EDUCATIONAL BACKGROUND

Tertiary Philippine Normal University
Taft Ave., cor. Ayala Blvd., Manila
Bachelor in Mathematics Education
2014-2018

Secondary Nuestra Señora de Aranzazu Parochial School
Gen. Luna St., Guitnangbayan I San Mateo, Rizal
2010-2014

Elementary Nuestra Señora de Aranzazu Parochial School
Gen. Luna St., Guitnangbayan I San Mateo, Rizal
2004-2010

EXPERIENCES

2nd DLSAU Education Research Congress

Presenter

National Research Council of the Philippines

November 25, 2017

De La Salle Araneta University

MATHTED's 11th Biennial International Conference in Mathematics Education

Presenter and Member of the Working Committee

Philippine Council of Mathematics Teacher Educators (MATHTED), Inc.

De La Salle University- Dasmariñas, Cavite

SEMINARS/TRAININGS ATTENDED

2017 International Pre-service Teachers Convention and Competitions (iPreSeT 2017)

PNU Institute of Teaching and Learning

December 19-22, 2017

Teachers' Camp, Baguio City

Instructional Leadership: A Journey from the Classroom to the Schools Division Office

PNU College of Graduate Studies and Teacher Education Research

December 16, 2017

Philippine Normal University

2nd DLSAU Education Research Congress

National Research Council of the Philippines

November 25, 2017

De La Salle Araneta University

MATHTED's 11th Biennial International Conference in Mathematics Education

Philippine Council of Mathematics Teacher Educators (MATHTED), Inc.

De La Salle University- Dasmariñas, Cavite

Sexual Orientation, Gender Identification and Expression Workshop

September 6, 2017

Philippine Normal University

#LIFEHACKS: Unlocking the Secrets Towards a Positive Life

September 6, 2017

Philippine Normal University

Recognizing and Addressing Diversity: Teachers in the Classroom

September 6, 2017

Philippine Normal University

STeM Talk of the PNU-DOST Scholars' Association

PNU-DOST Scholars' Association

August 12, 2017

Philippine Normal University

Second Annual De La Salle University Undergraduate Philosophy Conference 2017

Samahan ng mga Lasalyanong Pilosopo

August 5, 2017

De La Salle University-Manila

Tara! Usapang Graduate School Tayo (A Wellness Focus Group Discussion)

College of Graduate Studies and Teacher Education Research

March 25, 2017

Philippine Normal University

Lecture Forum on Innovative Thinking and Innovations in Science and Mathematics Education

Faculty of Science, Technology and Mathematics

October 19, 2016

Philippine Normal University

Sakamoto Math Seminar-Workshop

The PNU Math Club

September 28, 2016

Philippine Normal University

Research Forum and Lecture Series for National Science and Technology Week 2016

Faculty of Science, Technology and Mathematics

July 29, 2016

Philippine Normal University

Time and Energy Management Seminar

Every Nation Campus PNU

January 27, 2016

Philippine Normal University

PASSCODE: 3P Lecture Series Panonood

PNU Speech and Theater Arts Guild in Education

December 5, 2015

Philippine Normal University

Basic Orientation Seminar-Workshop on Debate

PNU Debate Society

November 19, 2014

Philippine Normal University

Gender Sensitivity Training for First Year Students

University Gender and Development Office

October 22, 2014

Philippine Normal University

Financial Empowerment Course for the Youth

PNU Social Science Club

July 30, 2014

Philippine Normal University

AWARDS/HONORS RECEIVED

Undergraduate

iPreSeT 2017 GIST Competition

2nd Place

December 21, 2017

Baguio Teachers' Camp, Baguio City

iPreSeT 2017 Research Presenter Competition

Participant

December 21, 2017

Baguio Teachers' Camp, Baguio City

Search for the Math Wizard 2017

Participant

January 26, 2017

Philippine Normal University

30th Annual STAT-IS-EEKS, A Nationwide Inter-University Quiz Show for Non-Statistics Majors

Participant

October 1, 2016

University of the Philippines-Diliman, Quezon City

Faculty of Science, Technology and Mathematics (FSTeM) Laurels

Fifth Highest Overall General Weighted Average

GWA: 91.50

March 18, 2016

Philippine Normal University

Secondary Education

Consistent Top Achiever

2010-2014

Nuestra Señora de Aranzazu Parochial School

Best in Christian Living Education

2010-2014

Nuestra Señora de Aranzazu Parochial School

Best in Filipino

2012-2014

Nuestra Señora de Aranzazu Parochial School

Elementary Education

HEKASI Quiz Bee- *1st Place*

October 7, 2007

Nuestra Señora de Aranzazu Parochial School

RESEARCHES CONDUCTED

Isang Pag-aaral ng mga Aralin sa General Mathematics kung saan Nahihirapang Matutunan ng mga Mag-aaral sa ika-11 na Baitang- September 2017

Philippine Normal University, Manila

Development and Validation of Computer-Assisted Instructional Material on Triangle Similarities- June 2017

Philippine Normal University, Manila

The Effectiveness of the Study Habits Program to the IPBA players of Nuestra Señora de Aranzazu Parochial School- February 2014

Nuestra Señora de Aranzazu Parochial School

The Relevance of Implementing Science Curriculum to the High School Honor Sections of Nuestra Señora de Aranzazu Parochial School San Mateo, Rizal

February 2013

Nuestra Señora de Aranzazu Parochial School

MEMBERSHIP IN ORGANIZATION

The PNU Math Club (PNU Manila)-Member	2015-present
PNU Debate Society (PNU Manila)-Auxiliary Member	2015
PNU Chorale (PNU Manila) - Member	2014
Aranzes Journal (NSDAPS) – Sports Editor	2013-2014

Aranzes Journal (NSDAPS) - Contributor	2012-2014
Theater Club (NSDAPS) - Member	2012-2014
Students' Mission in Lay Evangelization (SMILE) Club (NSDAPS) - Member	2011-2013
Young Ones for Unity (NSDAPS) - Member	2011-2012
Math Club (NSDAPS) - Member	2010-2014
Aranzan Choir (NSDAPS) - Member	2010-2014
Book Club (NSDAPS) - Member	2009-2010
Science Club (NSDAPS) - Member	2008-2009
Arts Club (NSDAPS) - Member	2007-2008

Log of Activities

Based on Practice Teaching Form 8- Journal of Experiences

Week 1 October 2-6, 2017

Significant Experience(s)	Learning(s)/Insight(s) Gained
October 2 Flag ceremony was conducted since it is Monday. During class time, the first five minutes were spent in arranging chairs. We introduced ourselves to the class in order for us to establish rapport with them. After that, Sir Decella discussed about approximating square root of numbers. Three examples were worked by him. As he worked on those examples, some students were able to spot the errors and correct them. Then, he gave another three for the students to work on. Some did the task but the rest did other things. One student who worked on the board thought that her solution was incorrect so she erased her work. Sir reprimanded the students due to other things done and too much happiness on knowing that they will have no classes on the next three days. He worked on the example that the student were unable to answer. After class, our team immediately planned on strategies we will do in order for students to be more motivated to learn mathematics. *Domain 1, Domain 2*	Too much time in reprimanding decreases learning time. I have to be compassionate but firm at the same time. Give an average of three examples with increasing difficulty, but make sure those are challenging rather than frustrating. In every observation, there must be an immediate plan of action.
October 6 First five minutes of the class time were spent in arranging the chairs. The LCD projector projected red light instead of 'normal' light, some of the lights were switched off. There was a puzzle given to them to serve as their motivation. The students reviewed about simplifying radical numbers. Students are active enough in correcting errors. There was a student at the back who was napping while having enrichment activity. There was a time when Sir Decella said that when somebody answered those items, they will get bonus points. Some items answered on the board didn't match on the answers flashed on the PowerPoint. *Domain 1, Domain 2*	When reviewing, present the complete solution on the board so that the students can clearly see how you got the answer. Make sure that the LCD projector is well-functioning. Don't sacrifice on the quality of your material in exchange of your student's optimal learning. Prepare and double-check my lessons before delivering it to the class. Motivation must be related to the lesson. Be mindful. Confront the sleeping student in a nice way. Motivation should depend on the background knowledge and experiences of the students.

Week 2 October 9-13, 2017

Significant Experience(s)	Learning(s)/Insight(s) Gained
October 9 While writing items for review, some are already answering and some are just staring at the board or doing something. One student called by Sir and said "*Di ko po makita.*" The flow of solution was not illustrated on the board. In the end, the students were struggling to understand the lesson. They worked on activities from the textbook about radical equations. The remaining three items from the textbook were served as their evaluation. While the students have their evaluation and Sir is talking to us at the same time, some are talking, some are copying answers. The result is sermon. *Domain 1, Domain 2, Domain 5*	The students were honest enough. Accept their honesty. When you say "Do you understand?", someone says yes and you're not convinced, give them similar problems to know if they really understand the lesson. Illustrate the step-by-step process. Give the students opportunities to solve. Have big enough writings on the board so that the students, especially at the back, can see.
October 10 It's Teacher Jeanlyn's turn to teach. She established rules for the class. She is sensitive enough to know if the class is still listening. One group always borrows correction tape due to having some mistakes on the puzzle. On the puzzle posted on the board, some wrote wrong answers on the blank, which results for having limited space to write the correct answer. *Domain 1, Domain 2*	Make sure that the students have adequate knowledge on prerequisite concepts. State the directions clearly, tell the students if they understand and that's the time that you will proceed. For some activities, encourage them to use pencil with eraser. Enough examples must be prepared if there are misconceptions. When students will answer on the cartolina, cover them with plastic cover and let them use whiteboard marker.
October 11 Sir gave comments to the first set of demo teachers. He discussed the format of our portfolio and showed us a sample based on his previous practice teacher. *Domain 4*	Take note on his comments for you to plan ahead on your teaching.
October 12 For the students who were struggling, both teacher Jeanlyn and teacher Sol guided the students. Most of the students who were raising their hands were in front. Teacher Jeanlyn also called those at the back. *Domain 1, Domain 2*	In discussion, make sure that you have at least 85% of your students attentive. For those who are napping during your class, confront them in a very nice way. Call your students sitting in front, then sitting in back to make sure they are attentive enough.
October 13 On the third day of Teacher Jeanlyn, the participation becomes more active and the classroom becomes more conducive on learning. However, the writings on the board are	In your class, establish rules in writing the final answers (e.g. the answers should be expressed in improper fractions, in exponential notation, etc.)

not that clear. Sir interrupted for some clarifications since a student asked questions about the solutions on the board. The class became a little bit chaotic, some are asking Sir and some are asking the rest of the practice teachers. In the end, they reconcile based on her rule that the exponential notation be simplified. (12th root of 1024 instead of 12th root of 2 to the 10th power). She really discussed in case to case basis which results to limited time for evaluation. *Domain 1, Domain 2*	

Week 3 October 15-20, 2017

Significant Experience(s)	Learning(s)/Insight(s) Gained
October 18 We talked about the students' projects for the second quarter. *Domain 4, Domain 5*	This reminds me that students should have performance tasks. Don't focus too much on planning lecture and discussion. In planning their projects, know the objectives and the guidelines on how will they do the project.
October 19 I am participating in the MATHTED's 11th Biennial International Conference on Mathematics Education while it is the first day of Teacher Mia to teach in our class. *Domain 7*	Promote mathematical thinking in the classroom. Let the students be creative and critical even in mathematics classes. Don't be afraid to connect with people to expand your personal and professional network.
October 20 It is the second day of the MATHTED conference while it is also the second day of Teacher Mia to teach in our class. *Domain 7*	Even if you are not around in the school attending in a conference, don't forget to know the current situation of your class. Ask the person who was in the class if they have problems or they are just fine.

Week 4 October 23-27, 2017

Significant Experience(s)	Learning(s)/Insight(s) Gained
October 23 It's Teacher Mia's third day. The room is getting cleaner than before. However, there were still some trashes scattered on the room. Teacher Mia discussed about the items on the chapter test for review. Sir Decella reprimanded the students at the back since they're noisy while reviewing. *Domain 1, Domain 2*	Conducting review to the students really helps them to review and validate the concepts they have learned from you. As much as possible, you should remind them to minimize their noise.
October 24 We administered the 2nd Periodical Examination to the students. Before they start taking their exams, I let the students settle down and give them reminders and directions. During the exam, while one student was going to the washroom, Teacher Angie flipped the paper so the other students won't see his answers. Half of the students scratched their head on the exam. *Domain 3, Domain 5*	Have the directions "No cheating" instead of "Avoid cheating." I need to be more firm and authoritative in examination period. It is better to get their paper when they are going out. The exam may seem easy for us but for the part of the students, the exam is very challenging.
October 25 The students submitted their projects and graded them. Aside from that, I interviewed Fhebby and knew more about her. *Domain 3, Domain 5*	Students really exert their effort to come up with the most beautiful output they can have. However, you still need to be objective in grading their projects. Learn also from your students as they learned from you. They too have their ideas and stories.
October 27 We spent the day on Bulletin board making. We budgeted, encoded the content on the computer, printed and bought the things needed and we were able to finish it on the afternoon. *Domain 1, Domain 4*	Keep on thinking on more creative ways to present your content. In making bulletin boards, learn to balance creativity and economy.

Week 5 October 6-10, 2017

Significant Experience(s)	Learning(s)/Insight(s) Gained
November 6 It's Sol's time to teach. She was able to express her thoughts in straight English. In motivation, She wasn't able to make the class quiet enough while giving instructions. The class is getting stagnant once again. *Domain 1, Domain 2*	We need to be sensitive enough to our classroom surroundings. We need to be more objective. Make sure you formulate clearest set of instructions you can make before giving it to the class.
November 7 We entered and we observed that there are still writings on the board. We spent time cleaning the board before we start. Most of the students didn't do their assignments on the paper. This implies that Teacher Sol failed to give instructions clear enough. She used guided discovery method to discuss the basic laws of proportion. *Domain 1, Domain 2, Domain 4*	It is clearly possible that students have prior knowledge on the lesson. We just need to think on how to extract those and relate them to the current lesson. It is inevitable that someone's talking while you're discussing. If it seems it will cause the noise of other students, tolerate them. I must be aware of the possible circumstances so Give instructions clearly before they start answering.
November 8 Sir Decella reminded us of some things that we should do such as the use of inquiry-based learning and the upcoming convention in Baguio *Domain 4*	Master the art of questioning. Trigger your curiosity. Ask questions, Formulate good questions. Let the students discover the concept through asking questions. Do your best to trigger their curiosity. Grab the opportunity to attend conventions, seminars, conferences and competitions!
November 9 Teacher Nicole let the class arrange their chairs before she begin. She started the class by introducing herself and giving drills. She let the students engage by asking them questions upon solving sample problems. She was sensitive enough for the students to listen. *Domain 1, Domain 2*	Don't rush your lesson but be aware of your time. When solving problems, teach the step-by-step process.

Week 6 November 20-26, 2017

Significant Experience(s) and Observation(s)	Learning(s)/Insight(s) Gained
November 20 First ten minutes were spent in arranging chairs. Teacher Nicole started the class with a game-based group activity. She introduced and illustrated the concept of similarities in given sets of things, then relating them on the concept of similar triangles. She gave example of similar triangles and discussed with the students. She discussed similarity ratio and helped them to find similarity ratio through guide questions. People at the back are doing other stuffs. Teacher Nicole once called a student who is inattentive and he said that he doesn't know. She remained quiet and she rather called the one raising her hand. The evaluation was on a small strip of paper. *Domain 1, Domain 2*	We can have sequencing of lesson which has a transition from concrete situations to abstract concepts. If a student is inattentive, called him/her and cannot answer your question, don't reprimand him/her. Let him/her feel that he/she needs to listen. Make sure your evaluation paper is big and spacious enough for the students to read and put their answers.
November 22 It's ITLympics! We practiced African dance on morning, then performed on afternoon. In the event, there were parents who were watching. The elementary students played traditional games on the quadrangle, some high school students played basketball and some played volleyball. Suddenly, it was raining so most of the games were stopped. *Domain 6*	Allot some time for us to recreate. Recreation and sports is very important for each and every one of us. Sometimes, there are unexpected circumstances in each event. Learn to adjust.
November 23 I was about to finish my lesson plan. It's Teacher Angie's turn to teach and my turn to assist. In proving part, the students were anxious! The presentation was too long. Sir clarified some things. Due to longer time for clarification, there was no time for evaluation. Angie let them do the evaluation at home instead. *Domain 1, Domain 2, Domain 4*	It is true that it is important to plan ahead. It is better that you are very ready in your lesson, from aiming your objectives to giving agreement to your students. As an assistant, stay vigilant. Seek for less anxious ways to teach proving to your students. Even in classroom, there are unexpected circumstances. Learn to adjust.
November 24 Teacher Angie's second day and my second day as an assistant. In Teacher Angie's visual aids, there is something missing on the given problem. She corrected it immediately. Janina	As an assistant, know also the content they are going to learn. Review and double-check your instructional materials before going to class. Encourage your students to help each other in getting the right answer.

and Viggo attempted to answer the problem but only Viggo got it right. Teacher Angie let him explain how he got the answer. Both students and Angie realized that Viggo's answer is right in spite of some misrepresentations in the problem. *Domain 1, Domain 2*	

Week 7 November 27-December 1, 2017

Significant Experience(s) and Observation(s)	Learning(s)/Insight(s) Gained
November 27 It's Teacher Julienne's turn. She spoke Filipino most of the time. She discussed the proof of the AA theorem together with the students. She gave examples of proving. *Domain 1, Domain 2*	It's not bad to explain your lesson in Filipino. However, you need to speak in English as much as possible since it is the mode of instruction in Math classes.
November 28 Sir Decella was not around so the behavior of the class changed! Teacher Julienne let them answer more exercises on triangle similarity. She explained the answer of the students but someone's not listening. The guidelines of the project for third quarter were announced. There was also a conversation that marks my mind: Teacher Julienne: "Basic di ba?" Student: "Hindi po!" *Domain 1, Domain 2, Domain 5*	This reminds me of never telling the students that Math is easy. However, motivate them that math is not difficult as they seem.

Week 8 December 4-8, 2017

Significant Experience(s) and Observation(s)	Learning(s)/Insight(s) Gained
December 4 The flag ceremony started at 7:00 in the morning. There were teachers who were roaming around while singing the national anthem and other hymns just to maintain the discipline of the students. During class time, while Teacher Julienne is discussing SAS and SSS Similarity Theorem, we're checking their projects. Out of 14 outputs, we checked only 6 parols. I made the criteria on the spot! *Domain 1, Domain 2, Domain 5*	Discipline your students such that you will not distract yourself and other people who are solemnly singing the national anthem and other hymns. Knowing the objective of their project is the first thing you should consider in making the criteria. Be firm that you have the deadline for submitting of projects.
December 5 I was preparing myself and my instructional materials when suddenly they announced that there will be no afternoon classes in preparation for the lighting ceremony in the University. On the lighting ceremony, some of our students are opening up and sharing their thoughts. Some parents are there! *Domain 4, Domain 6*	On the part of the students, they feel happy on having cancellation of classes but for the part of the teacher, it is a struggle, lesser time to finish the lessons. Feel the spirit of the tradition (i.e. Christmas) in spite of hectic schedule. Students have their own stories. Learn from them.
December 7 ITL Open House and Ribbon cutting ceremony was happened. In class time, it's my turn to teach! *(Please see my teaching reflections for more details.)* *Domain 6, Domain 1*	It's so very happy to attend events like this. Now I know the importance of extracurricular activities. The kids are very happy. I feel frustrated since actual happenings are very far from what is planned. However, learn from your mistakes and frustrations to become a better teacher.
December 8 I was checking the papers of my students. Many of them didn't get the right answer in item 5. I planned to discuss if we still have enough time. It's my second day of teaching! *(Please see my teaching reflections for more details.)* *Domain 1, Domain 5*	Effective teaching takes time to be honed. I still need to practice asking questions, managing the classroom and executing my lesson.

Week 9 December 11-15, 2017

December 11 I saw the students gathering in the hall for the flag ceremony. Sir Decella stood in front of them for some announcements. Only students at the front were listening due to inaudibility of voice at the back. On the flag ceremony, the singing of national anthem and other hymns turns out to be out of tempo First ten minutes of was spent on sermon due to late submission of the project of some students. It's Teacher Ericka's turn! She let the students make their Christmas tree as their activity. She counted ten for the students to settle down, 15 minutes left before Ericka proceeded to presentation. On the visuals, quadrilateral was seen instead of triangle. On evaluation, the students cannot avoid asking questions to each other. *Domain 1, Domain 2, Domain 3, Domain 4,* *Domain 5*	I will make sure that my voice is audible enough to the students. I realized that it is significantly disadvantageous of letting them sing in acapella especially when not everybody sees the conductor. Learn to budget and manage your time.
December 12 The students kept on fixing their chips while Ericka is discussing for them to pass but Ericka told them to do it later since it was distracting. *Domain 1, Domain 4*	Establish yourself so that you can be firm enough on your directions.
December 15 ITL Christmas party Development of 3rd quarter periodical exam *Domain 2, Domain 3, Domain 5, Domain 6*	There are students who are also having fun on Christmas party even though they do not celebrate Christmas. The exam must be heavily based on what the students knew and learned. However, make it only a bit more challenging.

Week 10 December 18-22, 2017

December 18 Debriefing 2017 was happened. Some of the faculty gave some short messages and inspirations. I led the class in singing the hymn. *Domain 6*	Never be afraid to volunteer to lead the class in singing the alma mater hymn as long you have the talent in singing.
December 19-22 iPreSeT 2017 was happened. *Domain 7*	Keep yourself updated with the trends in education. It is very fulfilling that I participated in competitions to know my areas of improvement. Philippine Professional Standards for Teachers (PPST) serves as a framework in upgrading teacher quality. We can transform education through gamification. There are several similarities in Indonesia and Philippines in terms of basic education and teacher education.

DOMAIN 1 CONTENT KNOWLEDGE AND PEDAGOGY

Strands:

1. Content knowledge and its application within and across curriculum areas
2. Research-based knowledge and principles of teaching and learning
3. Positive use of ICT
4. Strategies for promoting literacy and numeracy
5. Strategies for developing critical and creative thinking, as well as other higher-order thinking skills
6. Mother Tongue, Filipino and English in teaching and learning
7. Classroom communication strategies

REFLECTIONS

Mastery of the content is a must for every teacher. This does not limit on teaching the lesson itself but it must be connected to previous and next lessons you taught and you will teach. For example, in a lesson that you will teach, you let the students review the concepts that will be used in the lesson. For the lesson itself, tell the students (directly or indirectly) its relevance to the succeeding lessons or its application in real-life situations. Aside from that, it must be always aligned to the goals of the certain learning area. In my case, I align my lessons to the goals of K-12 Mathematics Curriculum which are critical thinking and problem solving.

Every strategy you will execute in the classroom lays stronger rationales which are evident in different researches and articles. As a teacher, I realized that thinking of the most appropriate approach in having my lesson should not be according to my own convenience. This should be according to the lesson I will teach, the objectives I must achieve and the learning environment of the students.

Not all lessons in mathematics incorporate the use of ICT. However, the use of ICT in lessons makes us more convenient, from making your lesson plan up to assessing your student.

In promoting literacy and numeracy, it is important to guide the students in developing reading, writing, and mathematical skills needed to cope with everyday life.

In developing critical and creative thinking, don't spoon-feed the students. Keep asking questions (which is usually done in inquiry-based learning) until they come up with the knowledge you want them to learn. In doing inquiry-based learning in teaching my lesson, I realized that it is significantly better if the students learn from their prior knowledge and out of their curiosity, with the proper guidance and facilitation of the teacher. If not done properly, this will lead to more confusion of the students.

Explaining the lesson in Filipino or in Mother Tongue helps the students to better understand the lesson. However, proficiency in English is also a must since the mode of instruction in Mathematics is English.

In classroom communication strategies, there are various ways of managing the class aside from saying "Keep quiet." and "Stop doing anything that is not related to my subject." Some nonverbal communications I did on our classroom include proximity control, facial expression and silence which tell the students that they are too noisy and they need to be attentive.

EVIDENCES

Conceptual Framework of Mathematics Education and Grade Level Standards based on the K-12 Mathematics Curriculum

K to 12 BASIC EDUCATION CURRICULUM

Figure 1.The Conceptual Framework of Mathematics Education

K to 12 BASIC EDUCATION CURRICULUM

GRADE LEVEL	GRADE LEVEL STANDARDS
	10 000 000, order of operations, factors and multiples, fractions and decimals including money, ratio and proportion, percent); geometry (polygons, circles, solid figures); patterns and algebra (sequence and number sentences); measurement (time, circumference, area, volume, and temperature); and statistics and probability (tables, line graphs and experimental probability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 6	The learner demonstrates understanding and appreciation of key concepts and skills involving numbers and number sense (divisibility, order of operations, fractions and decimals including money, ratio and proportion, percent, integers); geometry (plane and solid figures); patterns and algebra (sequence, expression, and equation); measurement (rate, speed, area, surface area, volume, and meter reading); and statistics and probability (tables, pie graphs, and experimental and theoretical probability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 7	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement);patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); geometry (sides and angles of polygons); and statistics and probability (data collection and presentation, and measures of central tendency and variability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 8	The learner demonstrates understanding of key concepts and principles of patterns and algebra (factors of polynomials, rational algebraic expressions, linear equations and inequalities in two variables, systems of linear equations and inequalities in two variables); geometry (axiomatic structure of geometry, triangle congruence, inequalities in a triangle, and parallel and perpendicular lines); and statistics and probability (probability of simple events) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 9	The learner demonstrates understanding of key concepts and principles of patterns and algebra (quadratic equations and inequalities, quadratic functions, rational algebraic equations, variations, and radicals) and geometry (parallelograms and triangle similarities and basic concepts of trigonometry) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 10	The learner demonstrates understanding of key concepts and principles of patterns and algebra (sequences, series, polynomials, polynomial equations, and polynomial functions); geometry (circles and coordinate geometry); and statistics and probability (combinatorics and probability, and measures of position) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.

Time Allotment:

Grade	1	2	3	4	5	6	7	8	9	10

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Manila

Practice Teaching Form 7

PT's Professional Readings

Bautista, J. (n.d.). Professional Education: Principles and Methods of Teaching. Manila: Philippine Normal University

Area **EDUCATION-CLASSROOM MANAGEMENT**

Key Points	Why do you feel this is helpful in teaching?	In what learning situation(s) is this applicable?
According to Bautista (n.d.), classroom management includes operation and control of activities such as seating, attendance, use of instructional materials, classroom courtesies which require planning. Teachers must possess the qualities of designing an orderly surrounding, establishing rules, adapting uncontrollable conditions and knowing how to seek help from school professionals and parents.	This is helpful in teaching that I can minimize unnecessary circumstances such as class's noise, maximize learning time and face unexpected circumstances.	This is applicable in the entire class hour, from entering the room to greeting them goodbye. This is also applicable in planning your instruction, seeking help to the school personnel concerned to utilize the facilities in the school.

Submitted by: Joanabelle C. Zita Date: September 28, 2017 Year & Section IV-18 BME

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INSTITUTE OF TEACHING AND LEARNING
Manila

Practice Teaching Form 7

PT's Professional Readings

Gawron, H. (2016). What the heck is inquiry-based learning?. *Edutopia.* Retrieved from https://www.edutopia.org/blog/what-heck-inquiry-based-learning-heather-wolpert-gawron

Area **INQUIRY-BASED LEARNING**

Key Points	Why do you feel this is helpful in teaching?	In what learning situation(s) is this applicable?
Inquiry-based learning is about triggering curiosity to learn something new. Teachers encourage inquiry and the students develop their own skills as content-area experts. In inquiry-based learning, the students develop questions that they are hungry to answer, research the topic using time in class, present what they've learned and reflect on what worked about the process and what didn't.	This is helpful in teaching because this will make students active in the discussion through asking questions. This will also help the students to probe, investigate and go deeper to the lesson.	This is applicable mostly on discussion since both the teacher and the student will talk and listen.

Submitted by: Joanabelle C. Zita Date: September 28, 2017 Year & Section IV-18 BME

OTHER PROFESSIONAL READINGS

Guido, M. (2017). All about inquiry-based learning: Definition, benefits and strategies. Prodigy. Retrieved from https://www.prodigygame.com/blog/inquiry-based-learning-definition-benefits-strategies/

Area **INQUIRY-BASED LEARNING**

Key Points

From a student point of view, it focuses on investigating an open question or problem.

From a teacher point of view, it focuses on moving students beyond general curiosity into the realms of critical thinking and understanding

Activities can be in a form of case studies, group projects, research projects, field work and unique exercises.

Why do you feel this is helpful in teaching?

This is helpful in teaching since this approach will enhance the students' creative and critical thinking as well as higher order thinking skills.

In what learning situations is this applicable?

This is applicable through giving them activities that mainly focuses on guided discovery, that is, the teacher will give set of sequenced questions in which the students will answer and learn from those answers.

Pitler, H., Hubell, E. & Kuhn, M. (2012). Using Technology with Classroom Instruction That Works (2nd ed). Retrieved from http://www.ascd.org/publications/books/112012/chapters/Cooperative-Learning.aspx

Area **COOPERATIVE LEARNING**

Key Points

Cooperative learning provides an environment where students can reflect upon newly acquired knowledge, process what they are learning by talking with and actively listening to their peers, and develop common understanding about topics.

Three recommendations for classroom practice are the following: Include elements of both positive interdependence and individual accountability; keep group size small; and use cooperative learning consistently and systematically.

Why do you feel this is helpful in teaching?

This is helpful in teaching because this will help the students to be responsible enough for their own learning through learning together. Through cooperative learning, they were accountable to the things that they have learned and they will learn.

In what learning situations is this applicable?

This is applicable in mainly giving dual and group tasks.

TeacherVision. (n.d.). Cooperative Learning. Retrieved from https://www.teachervision.com/professional-development/cooperative-learning

Area **COOPERATIVE LEARNING**

Key Points

It is an instructional strategy in which small groups of students work together on a common task.

It has five basic elements that allow successful cooperative learning: Positive interdependence, face-to-face interaction, individual and group accountability, group behaviors and group processing.

Using cooperative groups to accomplish academic tasks not only provides opportunities for students to develop interpersonal skills but also gives them authentic experiences that will help them be successful in their future careers.

Why do you feel this is helpful in teaching?

This is helpful in teaching since the students will not learn only from the teacher but also from their classmates having group activities.

In what learning situations is this applicable?

This is applicable in conducting group activities and giving group projects as well as having research, solving for a challenging math problem and letting them conduct a study.

Experiential Learning. (n.d.). Retrieved from https://facultyinnovate.utexas.edu/experiential-learning

Area **EXPERIENTIAL LEARNING**

Key Points

Experiential learning is about creating assignments and activities based on real-life situations or primary research that engage students in reflective, data-driven problem-solving with no predetermined right answers.

It contains all the following elements: reflection, critical analysis and synthesis, opportunities for students to take initiative, make decisions and be accountable for the results.

A teacher must choose relevant experiences that complement to the course outcomes.

Why do you feel this is helpful in teaching?

This is helpful in teaching since it will help the students to be mindful on themselves and the things that they have learned.

In what learning situations is this applicable?

This is applicable mostly during and after the classroom discussion where the students will discover more how much they have learned and how to they apply in their situations in life.

Learning Theories (n.d.). Experiential learning (Kolb). Retrieved from https://www.learning-theories.com/experiential-learning-kolb.html

Area **EXPERIENTIAL LEARNING**

Key Points

Kolb's experiential learning theory is a holistic perspective that combines experience, perception, cognition, and behavior.

It presents a four-stage cyclical model. Those stages are: Concrete experience (Do), reflective observation (observe), abstract conceptualization (think) and active experimentation (plan).

Why do you feel this is helpful in teaching?

This is helpful in teaching since the students will not just stare at the board and listen to the teacher but they will do the tasks given by the teacher, reflect on the things they have done and plan on the things they will do on the succeeding days.

In what learning situations is this applicable?

This is applicable in giving performance-based activities and assessment.

Reflective Learning. (n.d.). Retrieved from https://www.kent.ac.uk/learning/PDP-and-employability/pdp/reflective.html

Area **REFLECTIVE LEARNING**

Key Points

In reflective learning, students can (1) critically evaluate their learning; (2) identify areas of their learning that require further development; and (3) make themselves more independent learners.

In Gibbs reflective cycle, the stages are: Description, feelings, evaluation, analysis, conclusion and action plan.

The benefits of reflective learning include recording your development, knowing your strengths and weaknesses, understanding how you learn, developing self-awareness, planning your own development, learning about yourself, articulating your skills/learning to others and learning from your mistakes.

Why do you feel this is helpful in teaching?

This is very helpful in teaching since the students can also reflect on the things they have learned and how they will apply on their daily situation as well as on their goals.

In what learning situations is this applicable?

This is applicable usually during & after the class discussion, and on the time that the assessment results are released to the students.

Concept to Classroom. (n.d.). What is Constructivism?. Retrieved from http://www.thirteen.org/edonline/concept2class/constructivism/

Area **CONSTRUCTIVISM**

Key Points

People construct their own understanding and knowledge of the world, through experiencing things and reflecting on those experiences.

There are various teaching practices but in the general sense, students must be encouraged to use active techniques (e.g. experiments, real-world problem solving) to create more knowledge.

"Constructivist teachers encourage students to constantly assess how the activity is helping them gain understanding. By questioning themselves and their strategies, students in the constructivist classroom ideally become 'expert learners.' This gives them ever-broadening tools to keep learning. With a well-planned classroom environment, the students learn HOW TO LEARN."

Why do you feel this is helpful in teaching?

This is helpful in teaching since the students will use their prior knowledge in order to build their new set of knowledge.

In what learning situations is this applicable?

This is applicable mainly on classroom discussion as well as in guiding the students to make their performance tasks.

Sample Lesson Plan

Philippine Normal University
National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING

A Semi-detailed Lesson Plan in Grade 9 Mathematics on Altitudes of Triangles

By:
ZITA, JOANABELLE C.
IV-18 BME

Submitted to:
PROF. ROLANDO DECELLA

REVISED COPY

I. TOPIC: Triangle Similarity

SUBTOPIC: Altitudes of Triangles

REFERENCES:

Department of Education.(2014). *Grade 9 Mathematics Learner's module*. Retrieved from https://www.slideshare.net/paolodagaojes/9-math-lm-u3m6v10

McCall, B. (n.d.). *Corresponding Parts of Similar Triangles – Concept*. Retrieved from https://www.brightstorm.com/math/geometry/similarity/corresponding-parts-of-similar-triangles/

Similar Triangles - ratios of parts.(n.d.). Retrieved from https://www.mathopenref.com/similartrianglesareas.html

MATERIALS: Board marker

II. OBJECTIVES

At the end of the period, the students are expected to:

A. prove that if two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles;

B. find the altitude of one of the two similar triangles in each given examples; and

C. actively participate in the discussion.

III. STRATEGY

A. Inquiry-based learning

B. Lecture and discussion

C. Evaluation

IV. PROCEDURE

A. Daily routines

B. Drill /Review

If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other. The altitude rule states that the altitude is the geometric mean between the segments into which it divides the hypotenuse. The leg rule states that each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse. In Pythagorean Theorem, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of its legs.

C. Lesson Proper

1. Motivation

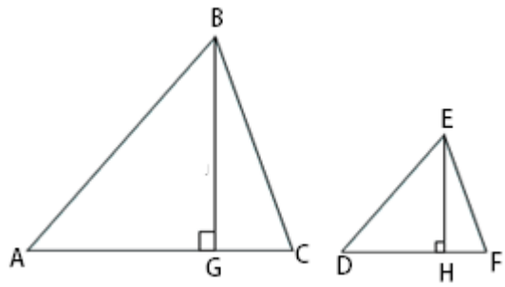
Altitude of a triangle is defined as a segment that intersects the vertex and the line containing the base. Altitude is also the other term of height of the triangle. Given that two triangles are similar, does this mean their corresponding altitudes are similar?

2. Presentation

Answer the following:

a. What are the conditions of similar triangles?

b. Given $\Delta ABC \sim \Delta DEF$, state the congruence of their corresponding angles and proportionality of their corresponding sides.



c. Draw the altitudes of the triangles. (Let's say BG and EH)

d. State the congruence of one pair of corresponding angles.

e. Are the angles formed by the altitude and base congruent? Why?

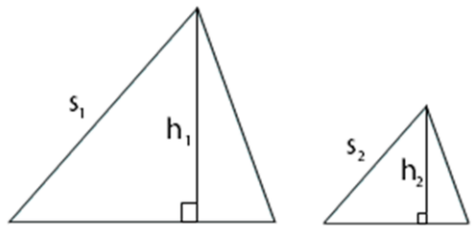
f. Does this imply $\Delta BGA \sim \Delta EHD$ or $\Delta BGC \sim \Delta EHF$? Why?

g. Does this imply that $\frac{BG}{EH} = \frac{BC}{EF} = \frac{AB}{DE}$? Why?

h. Does this also imply that $\frac{BG}{EH} = \frac{AC}{DF}$?

i. Then, what does this imply to the ratio of the altitudes and the ratio of the corresponding sides?

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

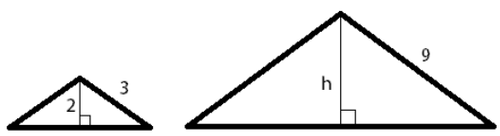


$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$

Example:

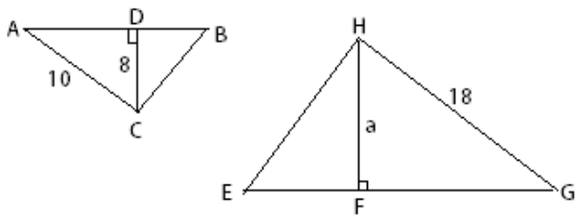
The two triangles are similar. Find *h*.

1.

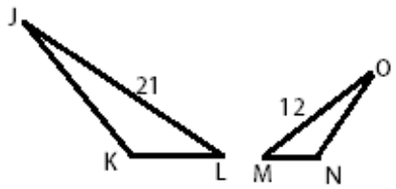


$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
$$\frac{3}{9} = \frac{2}{h}$$
$$3h = 18$$
$$\boldsymbol{h = 9}$$

2.



$$\frac{AC}{HG} = \frac{8}{a}$$
$$\frac{10}{18} = \frac{8}{a}$$
$$10a = 144$$
$$\boldsymbol{a = 72/5}$$



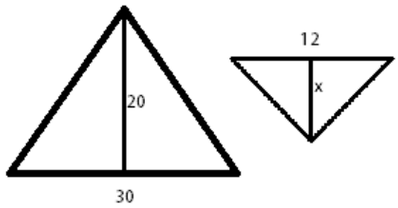
3. If the altitude of ΔJKL is 35, what is the altitude of ΔMNO?

$$\frac{AC}{HG} = \frac{8}{a}$$
$$\frac{10}{18} = \frac{8}{a}$$
$$10a = 144$$
$$\boldsymbol{a = 72/5}$$

3. Application

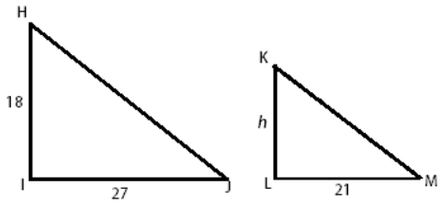
Each given pair of triangles is similar. Find the unknown dimensions in each item.

1.



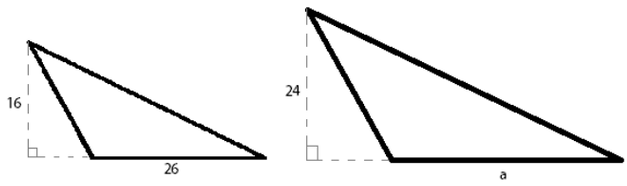
$$\frac{30}{12} = \frac{20}{x}$$
$$30x = 240$$
$$\boldsymbol{x = 8}$$

2.



$$\frac{IJ}{LM} = \frac{HI}{KL}$$
$$\frac{27}{21} = \frac{18}{x}$$
$$27x = 378$$
$$\boldsymbol{x = 14}$$

3.



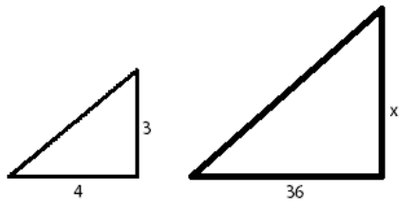
$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
$$\frac{26}{a} = \frac{16}{24}$$
$$16a = 604$$
$$\boldsymbol{a = 39}$$

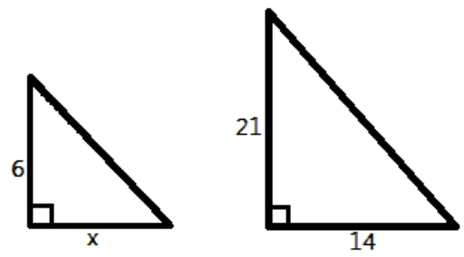
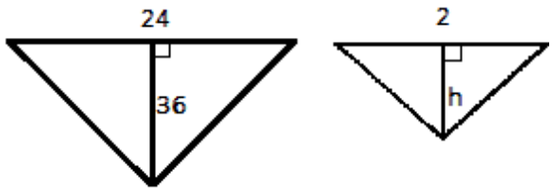
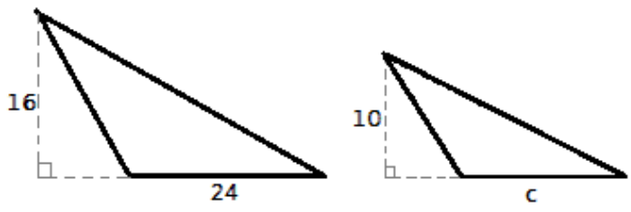
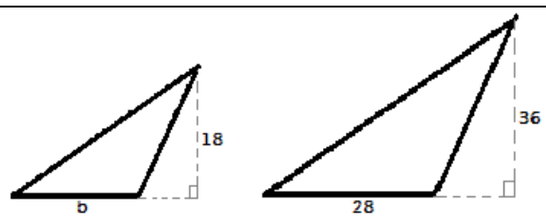
4. Generalization

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

5. Evaluation

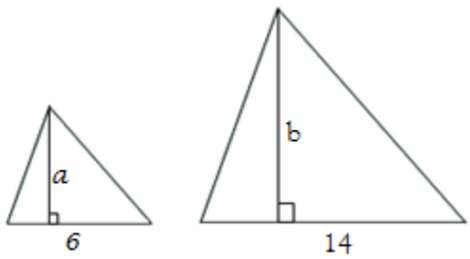
Each given pair of triangles is similar. Find the unknown value of the following:

1. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{4}{36} = \frac{3}{x}$ $4x = 108$ $x = 27$

2. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{x}{14}=\frac{6}{21}$ $21x=84$ $x=4$
3. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{24}{2}=\frac{36}{h}$ $24h=72$ $h=3$
4. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{24}{c}=\frac{16}{10}$ $16c=240$ $c=15$
5. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{b}{28}=\frac{18}{36}$ $36b=504$ $b=14$

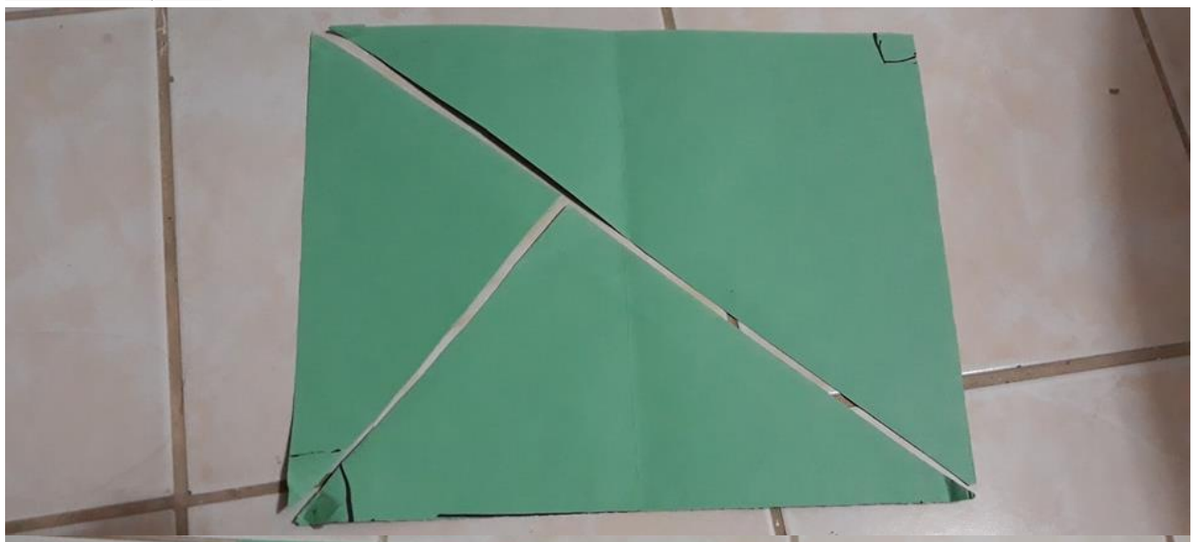
V. AGREEMENT

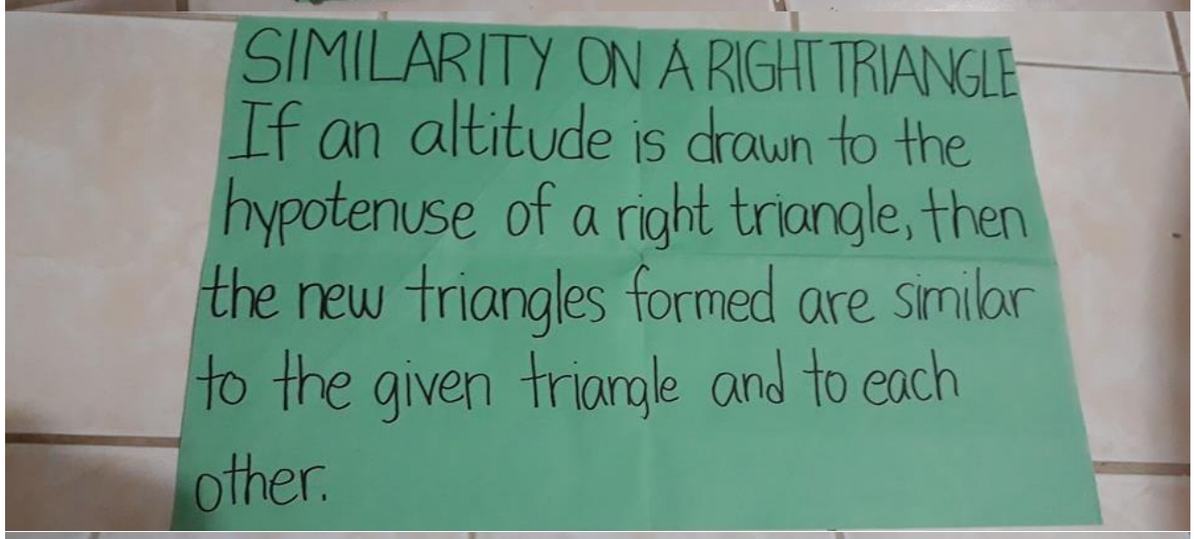
Given that these triangles are similar, find possible values of a and b. *You can enumerate as many as possible.*

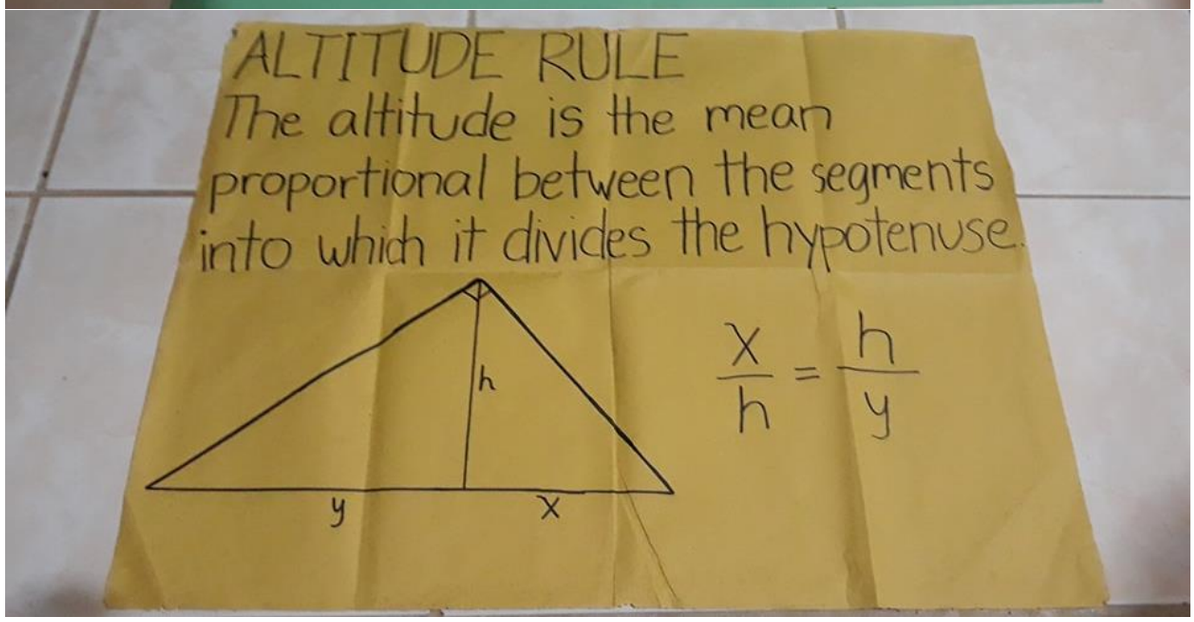


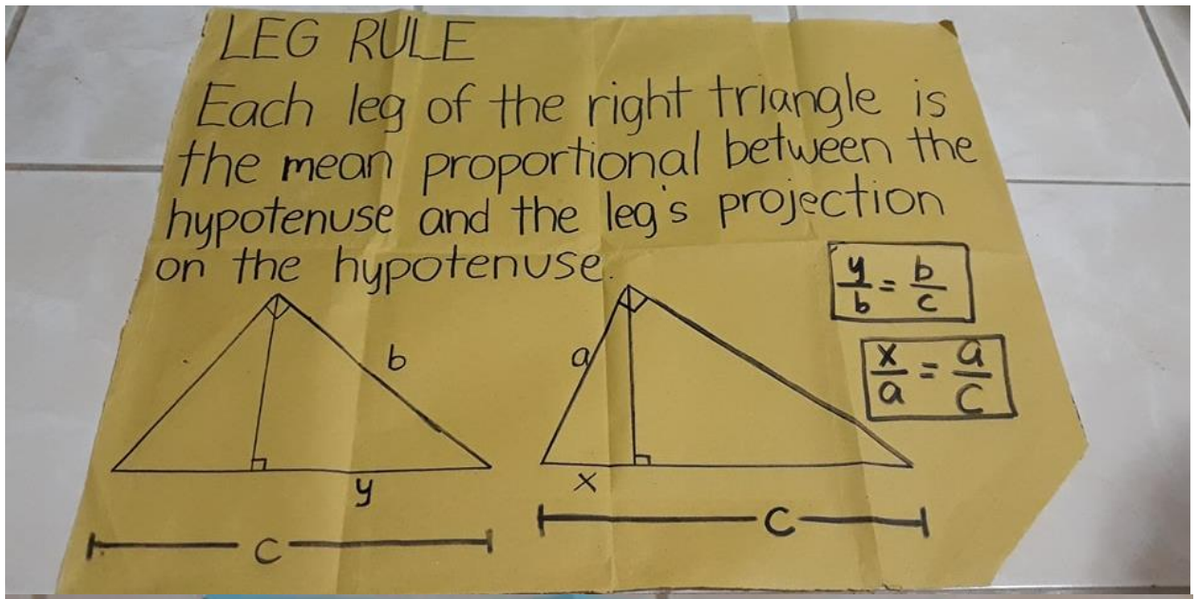
Sample Visual Aids

December 7, 2017








LEG RULE
Each leg of the right triangle is the mean proportional between the hypotenuse and the leg's projection on the hypotenuse.
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$\frac{x}{a} = \frac{a}{c}$
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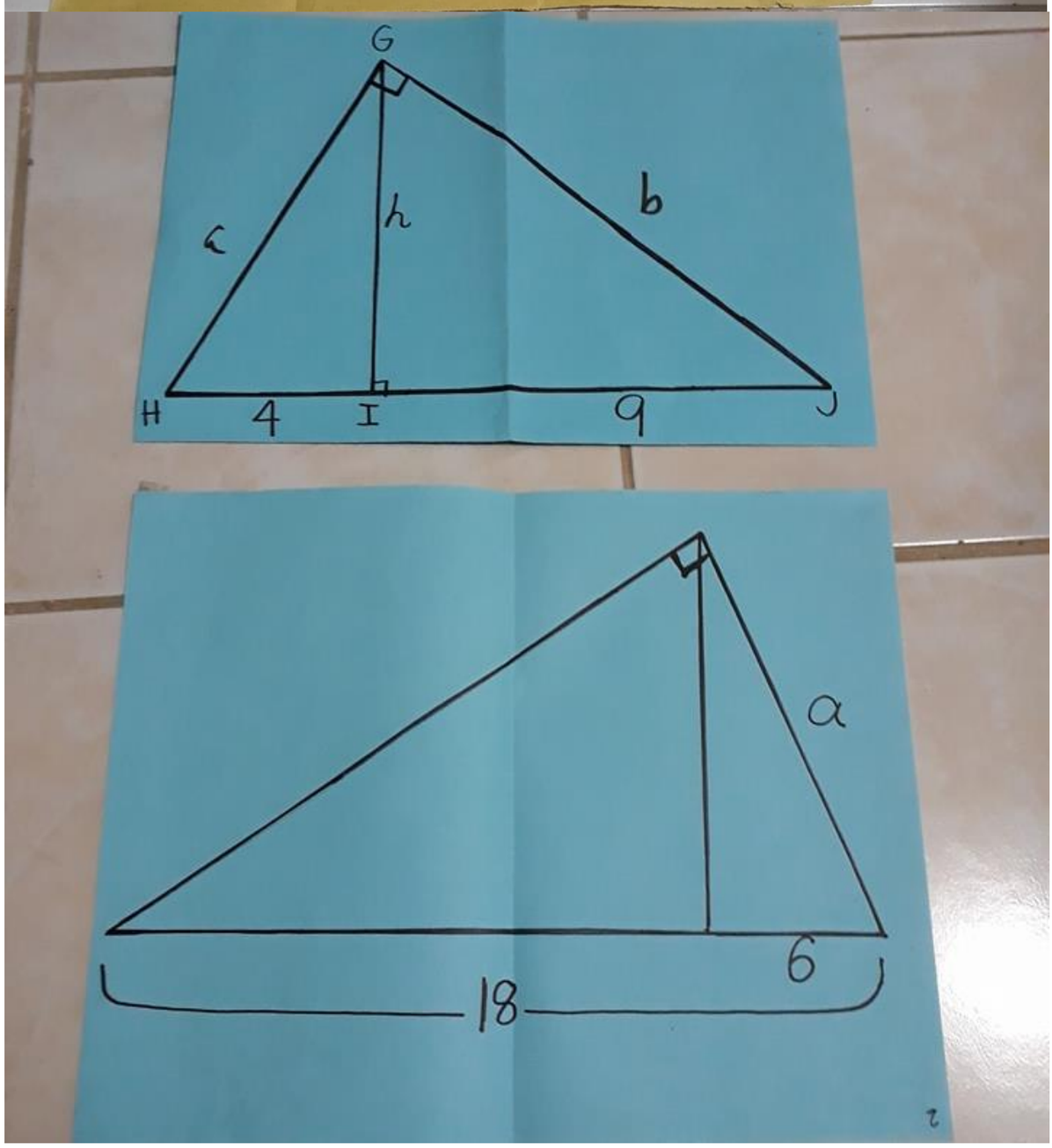
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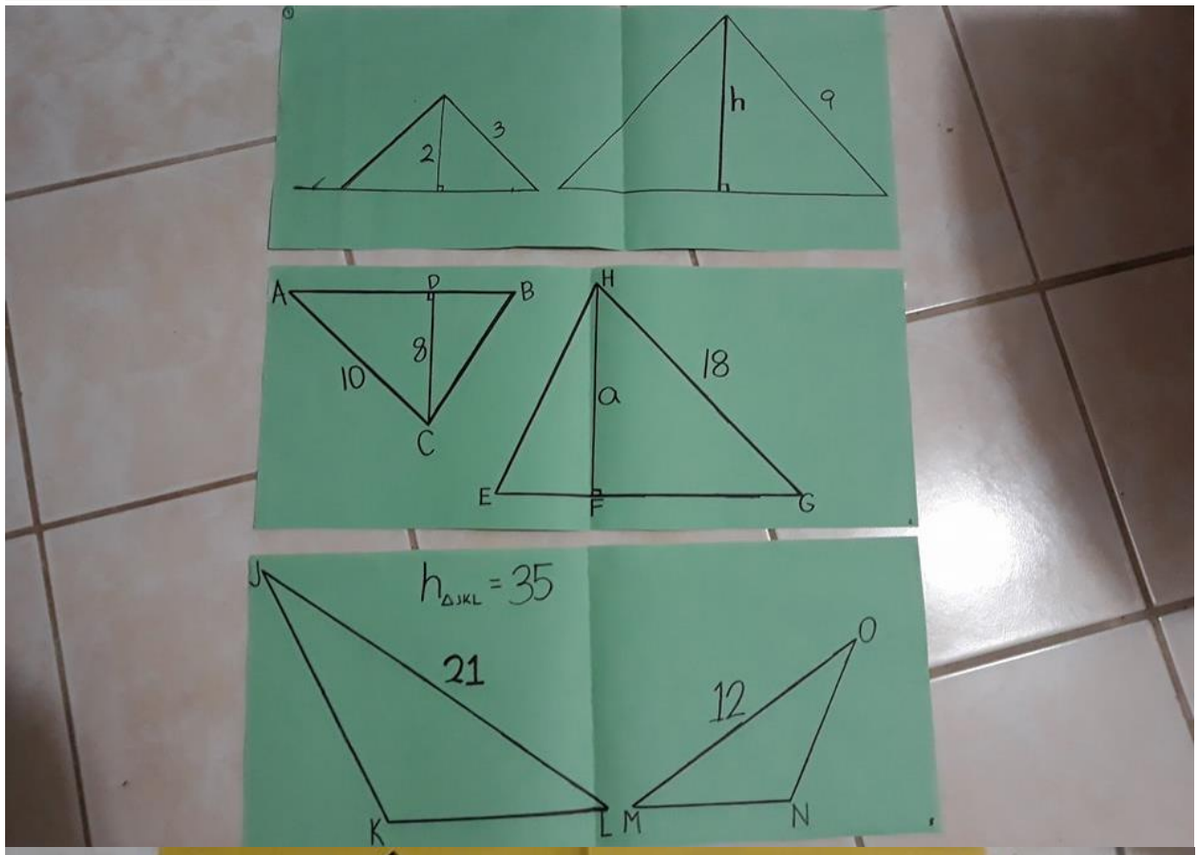
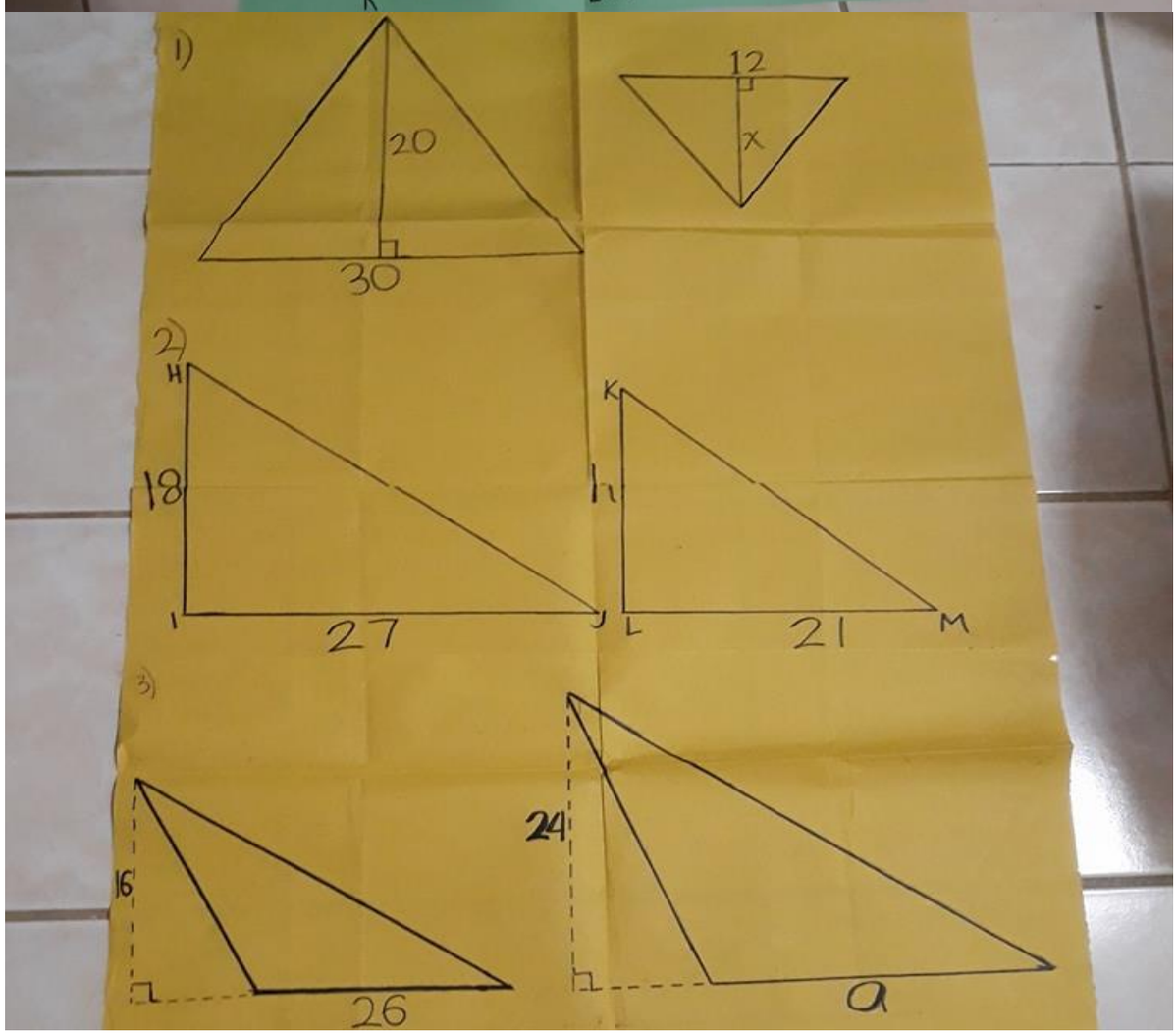
December 8, 2017





DEMONSTRATION TEACHING EXPERIENCES AND REFLECTIONS

December 7, 2017

I went into the room five minutes before the period begins so that we can arrange the chairs and other stuffs and prepare my visual aids. Then, Sir entered, I passed my revised lesson plan and evaluation form. We greeted each other a good afternoon. I told them to bring ½ index card for our preliminary activity. Some brought ½ but some brought other sizes of index cards. So, they asked me if they can use other size of index card. I decided to allow them since this a concept formation activity and they need to do the activity.

During the activity, I thought it will take 5-10 minutes but it took 20 minutes. I think it is because the students are processing what I've instructed to them. Some of them are processing what they have done; some are waiting for me, asking if they have done the right thing. Somehow, they have discovered and learned about the relations about the right triangles Sir Decella hinted me to say "Keep that." which was a joke for the students to laugh and have a more positive classroom atmosphere.

Once I posted the three similar triangles on the board, they were observing the relations of those triangles, and then they were wondering. They keep struggling on answering some of my questions so I rephrase my questions until they understand what I'm trying to extract. Sir suddenly took up the class and stated the theorem, as well as the leg rule and altitude rule. Sir called a student to repeat what the altitude rule and leg rule state. He called another two students to do the same. Fifteen minutes remaining, I present only one example instead of three due to lack of time. I wrote the complete solution applying those rules so that will know how to derive on the answer of the given example. Then, I immediately give them test instead of letting them do more exercises. Sir let the students pass their work so that the students will know that what they're doing was worth it.

Reflection:

I thought everything will go smooth. What has happened in this day's teaching is what I hadn't expected. I realized that a dilemma really exists, the dilemma between time and sufficiency of the lesson presented. You really want to present more, give more exercises for the students to learn a lot but one hour is not enough so I really need to adjust on how I will present the lesson so that I can finish in one hour. In the concept formation of the students, I knew that once the student discovered the concept, you must make a way to "nail" that concept. Let them repeat what they have stated, repeat until they fully understand and master so it would be easy enough to remember. Let the students know that what they're doing during your class is important. If the students did a significant activity in your class, let them show or submit it to you.

Based on my evaluation, I also realized that I must be firm, I must not be afraid to have variety of activities, do not mind much on time even though I still need to manage my class time, I really need to completely master my lesson before teaching it in the class so I won't be wasting my time figuring things out while my students are staring at the board.

December 8, 2017

Unlike yesterday, my teaching was more natural. It means that I'm now more comfortable in teaching. Like yesterday, I arrived few minutes earlier for me and for them to prepare and settle down.

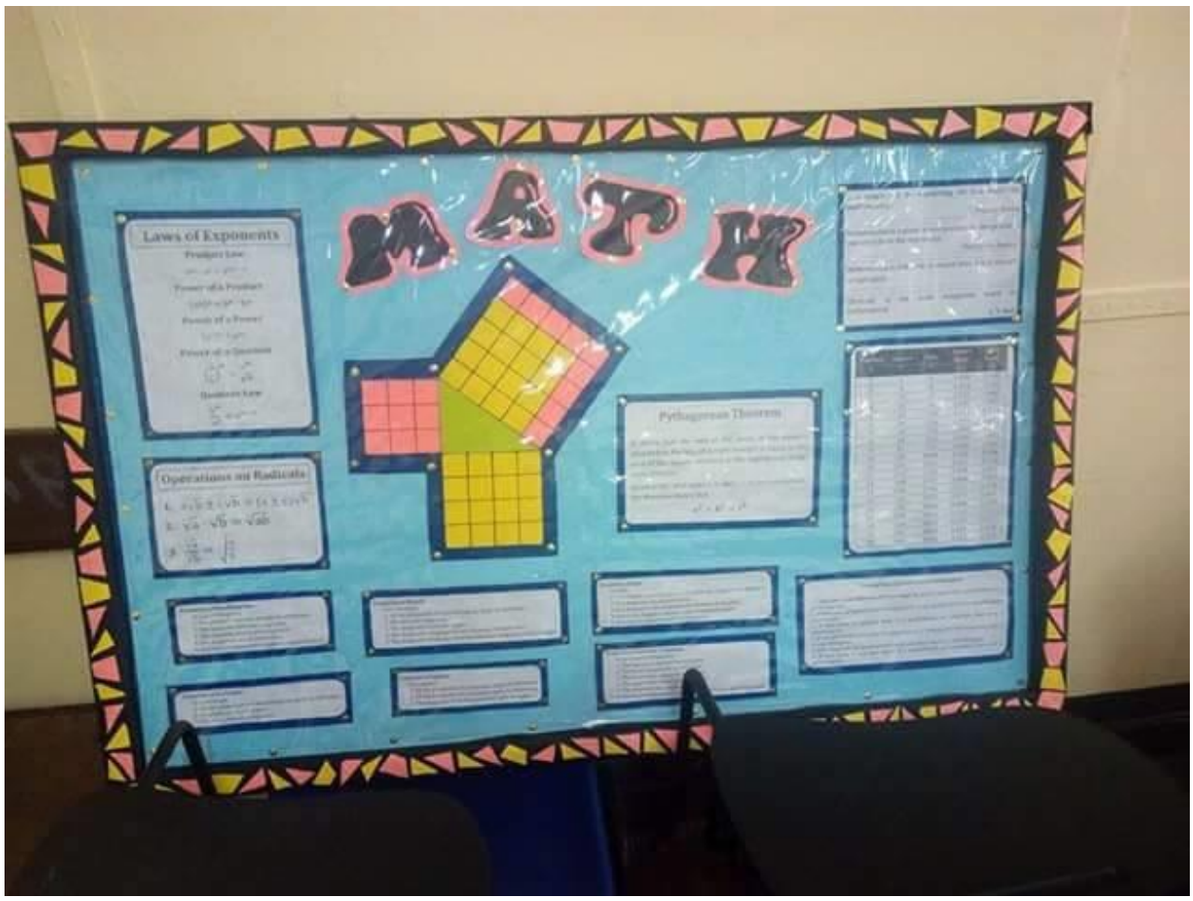
We reviewed about the yesterday's lesson, and then we proceeded to the next lesson which is altitudes of triangles. I drew two similar triangles and then I asked series of questions until we derived at the concept that the ratio of their altitudes is equal to the ratio of the corresponding sides. Though in the middle of asking questions, the students were struggling on answering some of my questions. To lessen the struggle, I rephrase my questions until they understand what I'm trying to extract. I posted the concept of altitudes of triangles on the board so that the students will remember. I presented one example on finding the missing dimensions of the triangle. We solved it together until we got the answer. It seemed to me that almost everybody understood so I gave them exercises. Somebody solved on the board and the rest solved on their papers. There is an adequate time left so I let those people who solved on the board explain their solution. Then, I gave them a 5-item evaluation. After they finished and passed their papers, there was fifteen minutes left so I decided to do an activity that will enhance their mathematical thinking (*Please see the Agreement part of the lesson plan*). To those who could answer, they will be given some chips. I gave them few minutes to think and then they were excited to say their answers. On this activity, they were enthusiastic and suddenly the bell rang which marks the end of the class (some students become little sad). The class ended and there were some students giving their answers to me which I was glad.

After class, Sir Decella told me that he observed the sides of my triangles drawn are curved and the two triangles I've drawn were not visually similar. I thought I could draw a triangle with straight segments.

Reflection:

First, I realized that I need to practice drawing figures. I should start using straight edge and compass until my hand is used to draw more accurate figures. Most of all, I should have more good practice in teaching until I can teach effectively. It is nice for the students to give activities that will enhance their mathematical thinking. It is time-consuming but it is really worth it.

Bulletin Board Making (October 28, 2017)



Making bulletin board takes a lot of time and effort wherein you will present your content in a very creative way such as your students will appreciate it on their first glance.

Before we made the bulletin board, we look for a bulletin board since there is no bulletin board on our room. We found a bulletin board on a Grade 10 classroom. I removed the old contents so that we could replace them with new ones.

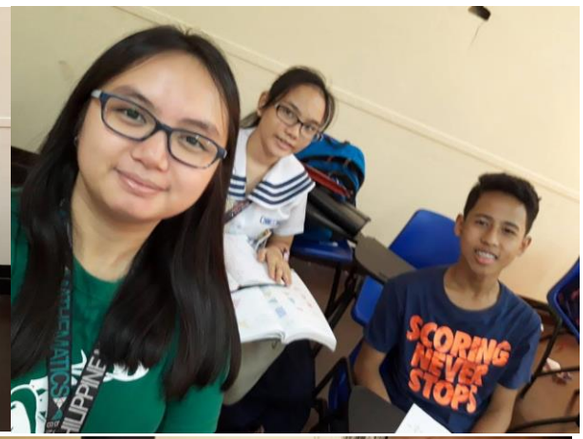
We started on determining on the content that we will put on the bulletin board. According to our supervisor, the content would be square root & cube root of numbers, radicals, the Pythagorean Theorem and properties of quadrilaterals. We need to decide on how we will put present those contents in the most elegant way. We need to consider on the content itself, the colors of we will use, the font and font size of the text, as well as the materials that we will use. We planned on the design and then we immediately buy things on school supplies store. Some of my group mates were encoding and printing the contents. On designing the bulletin board, I thought it would be easy since you will just cut and paste something but it was somehow challenging for me because you also need to arrange, determining if the contents are too big or too small, overemphasized or hardly seen.

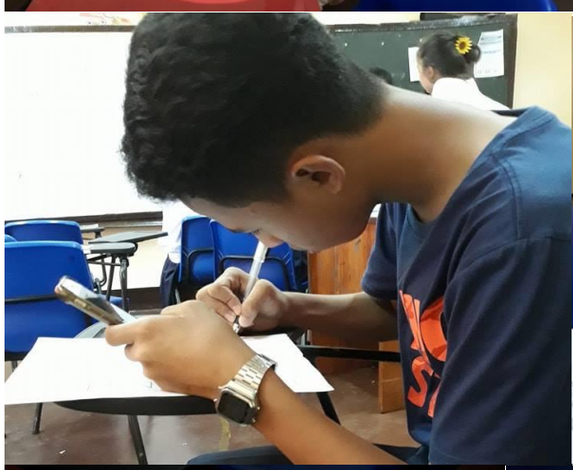
As one of the people who put contents on the board, I realized that you need to decide on how to arrange the content. This reminds me that you need to observe proper spacing so that the bulletin board looks more elegant.

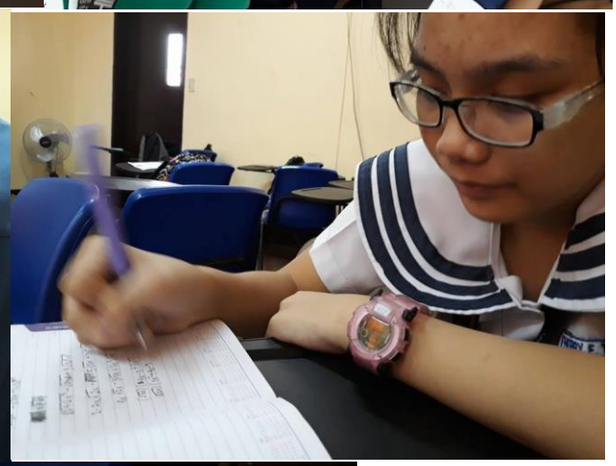
As one of the people who buy things, look for things of good quality but affordable. You don't need to buy expensive resources just to make your bulletin board look beautiful. Use your creativity and resourcefulness; seek help from your colleagues when designing your bulletin board.

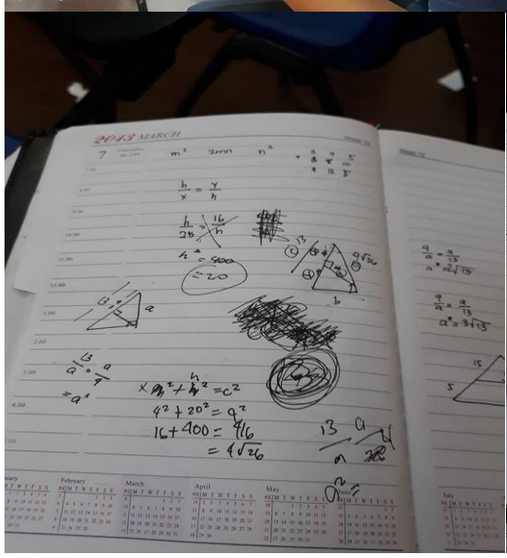
Lastly, as a future professional teacher, learn to balance content, creativity and equity. Present your content in the most creative way that your expense on those resources is as low as possible.

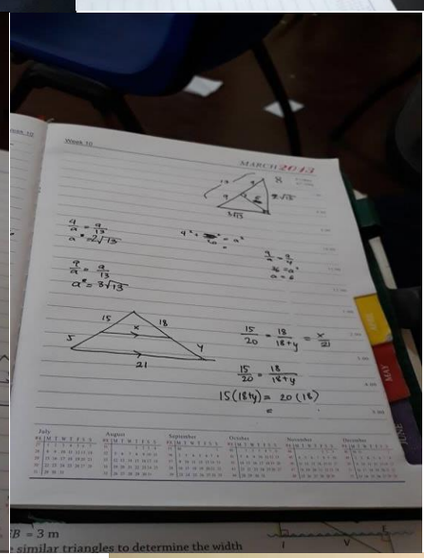
Tutorial Sessions











Student Tutoring

Narrative Report

I tutored, Mark, Julius, Michelle and Fhebby of Grade 9.

In the case of Mark, he was a little bit struggled with triangle similarities according to him. So, I gave him enrichment exercises on triangles. He was able to get some correct answers but there were some flaws on his solutions so I asked some questions until he realized that he corrected the flaws on his solution.

In the case of Julius and Michelle, they were struggling on the operations of radicals particularly in addition of three or more terms that involves simplification of radicals. They got three items from the textbook for us to work on. I asked some questions as they went through solving in order for them to be guided. I started on the asking them if there are radicals needed to be simplified until combining similar terms to arrive at the final answer.

In the case of Fhebby, we discussed about the operation of radicals and basic proportionality theorem while we reviewed triangle similarities and right triangle similarity. Since the operation of radicals is the lesson in which she were most struggled with, we started by giving her three examples, one in which I will work on and the one in which we both will work on and one in which she alone will work on. On the third example, she was still struggled so I helped her but as minimal as possible. I gave her two more examples for her to work on. I kept on asking questions from simplifying radicals until performing the indicated operations. On those two examples, she was able to answer though some terms were not yet simplified. On the lesson of basic proportionality theorem, we got two items from the textbook for us to work on. I let her solve on her own on the first example. Unlike in the preceding lesson, she sought little help from me. This implies that she somehow mastered the lesson.

On the lesson of triangle similarity, I let her determine and justify (by stating the theorem that supports her answer) on given pairs of triangles if they were similar. This time, she was the one who is explaining to me since I will assess whether she got the concepts for this lesson. She was able to explain her answer and her justification so this means that she had mastered the lesson.

On the lesson of right triangle similarity theorem, she understood the concepts. However, in finding the missing dimensions of a given triangle through applying those concepts, she has algebraic flaws in her solution. This was evident on forgetting to simplify the equation by multiplication property of equality or *cross multiplication*. Through probing, she realized that there is something wrong on her solution so she corrected her solution until she got the correct answer.

DOMAIN 2 LEARNING ENVIRONMENT

Strands:

1. Learner safety and security
2. Fair learning environment
3. Management of classroom structure and activities
4. Support for learner participation
5. Promotion of purposive learning
6. Management of learner behavior

REFLECTIONS

Learning environment does not limit to the physical school environment.

More spacious classroom makes students learn more effectively.

As a teacher, I urge the students to keep their classroom conducive (through arranging chairs, telling relevant stories, etc.)

In learner safety and security, it is important that you let the students feel safe and secure in a way that you are compassionate enough for them to share their thoughts and stories.

As much as possible, establish a fair learning environment to all students, give them fair learning opportunity in spite of different seating arrangement and different sizes of classroom. The writings on the board should be clearly seen at the back.

In management of classroom structure and activities, you really have to consider the size of the room, do not limit the seating arrangement into row-by-row arrangement so they won't be stagnant. In saying that activities should be suitable to the students' interests, I realized that it is true since they will easily learn the lesson. Saying degrading words to your students really deprived their morale to excel.

In support for learner participation, keep them motivated. Encourage them to recite. If they got the wrong answer, let them feel that they learned new rather than be humiliated.

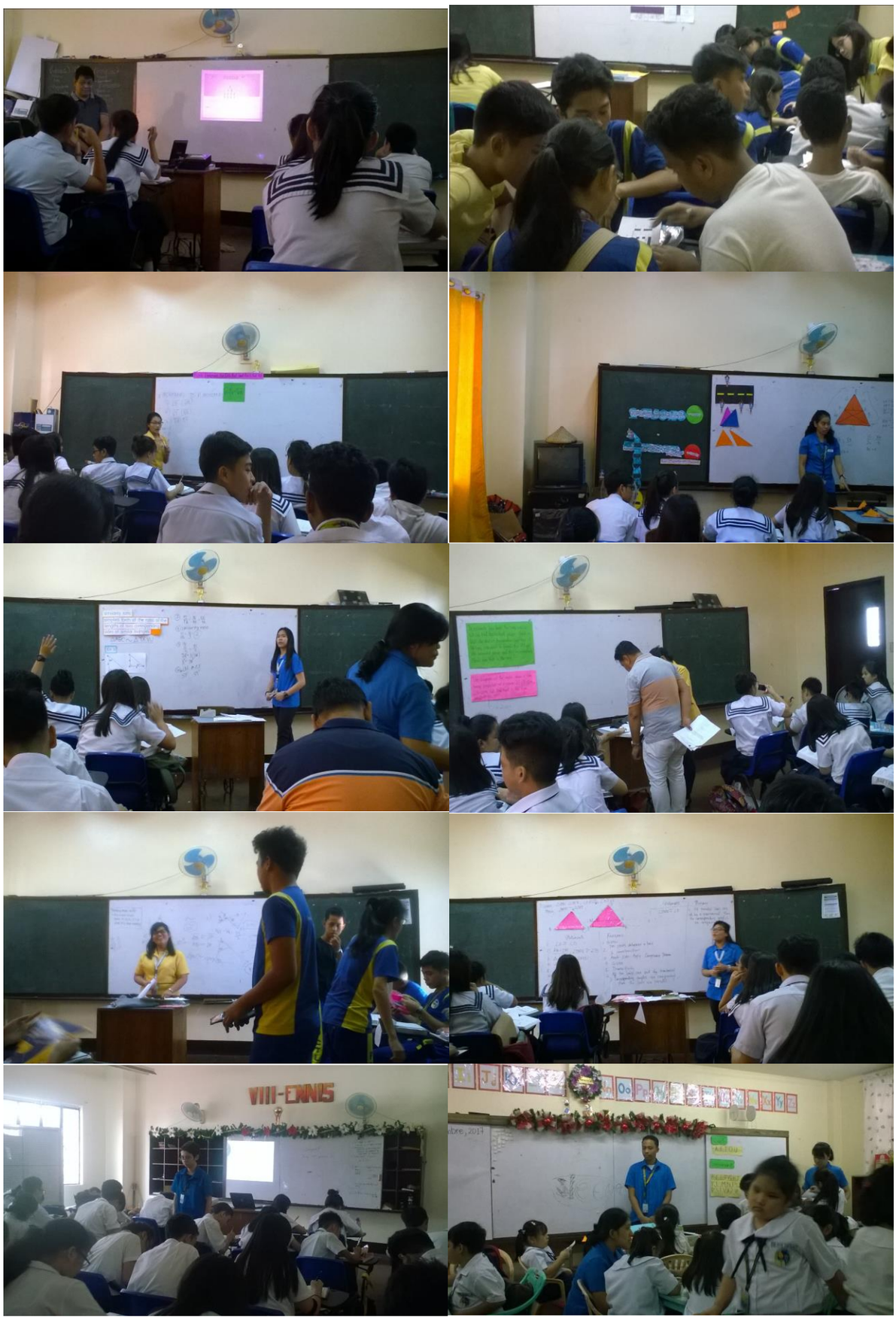
In promotion of purposive learning, encourage the students to set their goals in learning so that they will be motivated to learn with the purpose rather than to learn for the sake of finishing school.

Lastly, there are different ways to manage learner behavior and this heavily depends how the students behave. As a teacher, be compassionate but firm at the same time.

I realized that you must be sensitive enough on the things that are happening in the classroom. Sometimes, the students say that they understand the lesson even their facial expression is contrary to what they say. Observing their disposition and gestures you must know if they are ready to learn, they understand the lesson and they have learned what you have taught.

EVIDENCES

Classroom observations



Classroom Observations

October 2, 2017

The first five minutes were spent in arranging chairs. Sir Decella discussed about approximating square root of numbers. Three examples were worked by him. As he worked on those examples, some students were able to spot the errors and correct them. Then, he gave another three for the students to work on. Some did the task but the rest did other things. One student who worked on the board thought that her solution was incorrect so she erased her work. Sir reprimanded the students due to other things done and too much happiness on knowing that they will have no classes on the next three days. He worked on the example that the student were unable to answer.

Reflection:

Anticipate possible classroom management problems when planning your lesson. In the classroom, I have to be compassionate but firm at the same time. Give an average of three examples with increasing difficulty, but make sure those are challenging rather than frustrating. While the students are solving, make sure that all of your students will do the task. Tolerate them if they do things out of your subject because too much time in reprimanding the whole class decreases learning time.

October 6, 2017

First five minutes of the class time were spent in arranging the chairs. The LCD projector projected red light instead of 'normal' light, some of the lights were switched off. There was a puzzle given to them to serve as their motivation. The students reviewed about simplifying radical numbers. Students are active enough in correcting errors. There was a student at the back who was napping while having enrichment activity. There was a time when Sir Decella said that when somebody answered those items, they will get bonus points.

Some items answered on the board didn't match on the answers flashed on the PowerPoint. The students were thinking on those mismatches which results to double-checking the solutions and thinking of some ways on how to derive on the answers flashed in the PowerPoint presentation.

Reflection:

When reviewing, present the complete solution on the board so that the students can clearly see how you got the answer. Make sure that the LCD projector is well-functioning. Don't sacrifice on the quality of your material in exchange of your student's optimal learning. Prepare and double-check my lessons before delivering it to the class. Motivation must be related to the lesson. Be mindful. Confront the sleeping student in a nice way. Motivation should depend on the background knowledge and experiences of the students.

October 9, 2017

While writing items for review, some are already answering and some are just staring at the board or doing something. One student called by Sir and said "*Di ko po makita*." The flow of solution was not illustrated on the board. In the end, the students were struggling to understand the lesson. They worked on activities from the textbook about radical equations. The remaining three items from the textbook were served as their evaluation. While the students have their evaluation and Sir is talking to us at the same time, some are talking, some are copying answers. The result is sermon.

Reflection:

The students were honest enough. Accept their honesty. When you say "Do you understand?" someone says yes and you're not convinced, give them similar problems to know if they really understand the lesson. Illustrate the step-by-step process. Give the students opportunities to solve. Have big enough writings on the board so that the students, especially at the back, can see.

DOMAIN 3 DIVERSITY OF LEARNERS

Strands:

1. Learners' gender, needs, strengths, interests and experiences
2. Learners' linguistic, cultural, socio-economic and religious backgrounds
3. Learners with disabilities, giftedness and talents
4. Learners in difficult circumstances
5. Learners from indigenous groups

REFLECTIONS

Students have different abilities and the combination of those makes the beauty of the class.

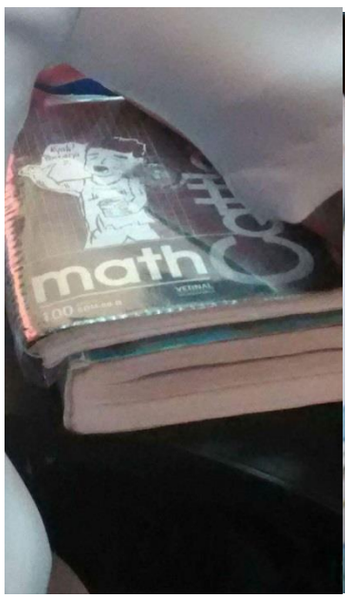
Based on my observation in the class of 9-Dewey and other classes in ITL, I realized that even though they have differences in abilities and backgrounds, they are harmonized.

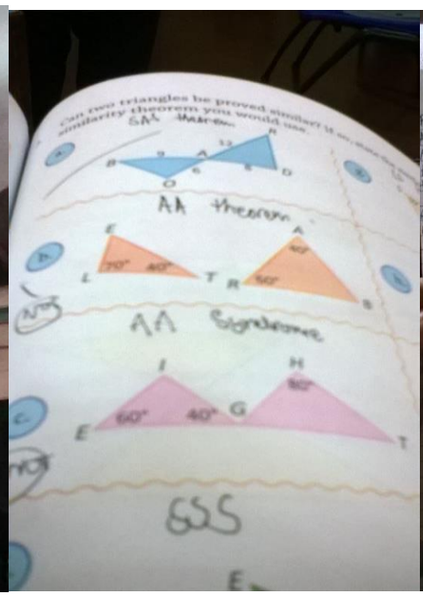
There are students whose favorite subject is Math. There are students who do not excel in Math but excel in other learning areas.

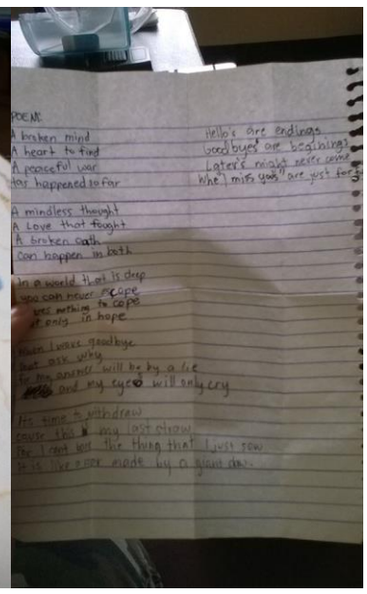
In a class, it is true that there are clowns, there are ones who are studious, there are ones who are weak in certain subject areas, and there are quiet ones. In spite of their differences, they aim to have a lot of things to learn. The important thing is that they are happy, they learn together.

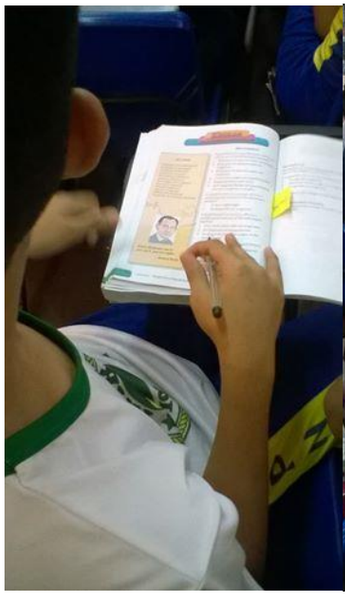
EVIDENCES

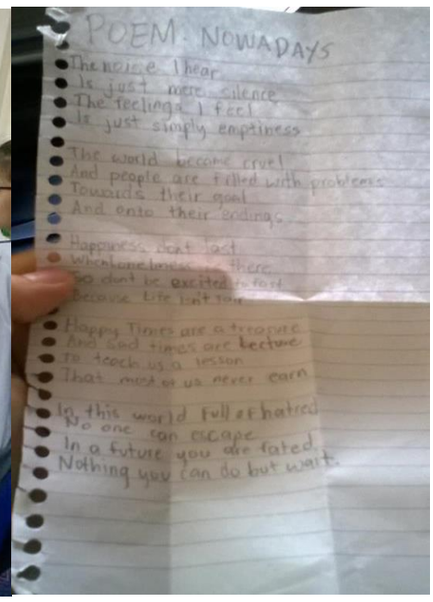
Things of some students











A classroom situation during vacant time

Case Study

Based on PT Form 10

I. Personal Data

a.	**Name of child**	Fhebby F. Tengco
b.	**School**	PNU- Institute of Teaching and Learning
c.	**Home Address**	Malate, Manila
d.	**Grade/Yr. &Section**	9-Dewey
e.	**Age**	14
f.	**Date of Birth**	February 14, 2003

II. Family Background

Father	Truck driver
Mother	Housewife
Socio – eco level of the family	Fair
Language spoken at home	Filipino
Church Affiliation	Iglesia ni Cristo
Marital status of parents:	Living together
Number in the Family:	7
Order of Birth:	5th/ youngest

III. **Statement of the Problem**

What are the factors that affect her underachievement in mathematics?

IV. Examination and Diagnosis

Most of her written outputs (exams and quizzes) have low scores (*See Evidences in Domain 5).* Based on her results in written output, it was evident that she has underachievement in mathematics. Her least enthusiasm in mathematics greatly affects her performance. Based on her interview, Mathematics is her least favorite subject. She also said that low grades didn't affect her, which implies the urge to perform better in mathematics.

V. Treatment/Remedies Applied

There are two treatments applied: Counseling and tutoring. In counseling, this is informally conducted since it was done during vacant time. I let her allow to express her thoughts and share her works so that she could be more confident enough. In tutoring, we spent in a total of four days discussing, reviewing and refining the topics covered in the duration of our practice teaching. The tutoring uses the approach of inquiry-based learning so she can find out her misconceptions and ways to solve.

VI. Evaluation

Based on her performances in tutoring as well as in the last quizzes, she performed better than before. This was evident in her records as well as in her ability to justify (*See the Narrative Report*).

Anecdotal Record

"You cannot predict the future unless you take action."

A quiet student from Grade 9 Dewey and the youngest among the five children of a delivery truck driver and a housewife.

She walked and rode a jeep when going to school.

During her pastime, she uses Animo, a messenger with specific tags. In her case, she joined in a chat room that has interests in Anime. She also makes blogs about Animo and their community.

She published some of her literary works especially poems in Tumblr.

She showed her handwritten poems and other literary works to me. This year, she wrote 8 poems and by the end of the year, she could have 10 poems.

She has few close friends, only two from her section. (Evita and Lanz)

Every Wednesday, they have their samba in their church because every Thursday, she will accompany her niece.

Math is her least favorite subject because of its difficulty. Based on her, she struggles on equations, drawing and analyzing curves and graphs, mensuration in geometry, as well as in basic concepts on statistics. Nevertheless, geometry is her favorite branch of math since she is fond of shapes. During their recess time, she and her friends help each other in solving math problems.

She spent most of her pastime in her cellphone, watching anime shows

She is close enough to her two brothers and her father.

She has her own nicknames: Jelly because of jelly beans, and Kin, derived from Kin Haru meaning golden spring.

She shared something about one of her watched anime shows entitled Koro Sensei which she can relate it to history, school and life.

About her insights and principles in life, she believes that grades are just grades; the important thing is to achieve your goal in life. According to her, she was bullied due to her weirdness but she didn't mind because that will be the cause of her frustration.

She loves crafting, DIYs and self-defense since she wants to be stronger person.

Few years from now, she wants to be a Values Education teacher. She also wants to have a business or work while pursuing college degree so that she can earn money on her own.

She has low grades but she was not affected.

"You cannot predict the future unless you take action."

Almost everything that happens in your life is based on your own decision. There is no such thing as bad influence.

As lessons in life, she said that when you are down, you have to rise and when you tell a story, it should have sense.

She is frustrated when somebody got her things (especially her personal things) without asking permission. One time, her classmates got her jacket without asking permission and even not giving back to her. She didn't anyway tolerate him/her since anger and hatred will cause her unhappiness in life.

She is more boyish than her brothers.

She is a Math club member but she wants to join Robotics and wants to propose to have a Book club for the students who have interests in reading.

She hates to share private information about her.

Narrative Report on Tutoring

First, we discussed about the operation of radicals and basic proportionality theorem while we reviewed triangle similarities and right triangle similarity. Since the operation of radicals is the lesson in which she were most struggled with, we started by giving her three examples, one in which I will work on and the one in which we both will work on and one in which she alone will work on. On the third example, she was still struggled so I helped her but as minimal as possible. I gave her two more examples for her to work on. I kept on asking questions from simplifying radicals until performing the indicated operations. On those two examples, she was able to answer though some terms were not yet simplified. On the lesson of basic proportionality theorem, we got two items from the textbook for us to work on. I let her solve on her own on the first example. Unlike in the preceding lesson, she sought little help from me. This implies that she somehow mastered the lesson.

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DOMAIN 4 CURRICULUM AND PLANNING

Strands:

1. Planning and management of teaching and learning processes
2. Learning outcomes aligned with learning competencies
3. Relevance and responsiveness of learning programs
4. Professional collaboration to enrich teaching practice
5. Teaching and learning resources including ICT

REFLECTIONS

Planning lessons gives us directions on what we will do in the classroom and helps us to maximize the class time. In planning lessons, always look back on the curriculum guide for us to know the learning competencies the students should have and how much time we should allot in each lesson.

In relevance and responsiveness of learning programs, it is important to consider where this lesson will go. It is not just for the sake of finishing the lesson but how much impact will the lesson make for the students' long-term goals.

Even though I know how plan my lessons, it is still important to seek advice from the experts (in my case, from my supervising instructor) since he can improve my plan through giving me a clearer view on what I will do to the class.

In teaching and learning resources including ICT, not all mathematics lessons incorporate the use of ICT. There are particular lessons wherein it is appropriate to use ICT.

Without planning, you will indeed not know what to do because I experienced that.

EVIDENCES

K to 12 BASIC EDUCATION CURRICULUM

Figure 1.The Conceptual Framework of Mathematics Education

K to 12 BASIC EDUCATION CURRICULUM

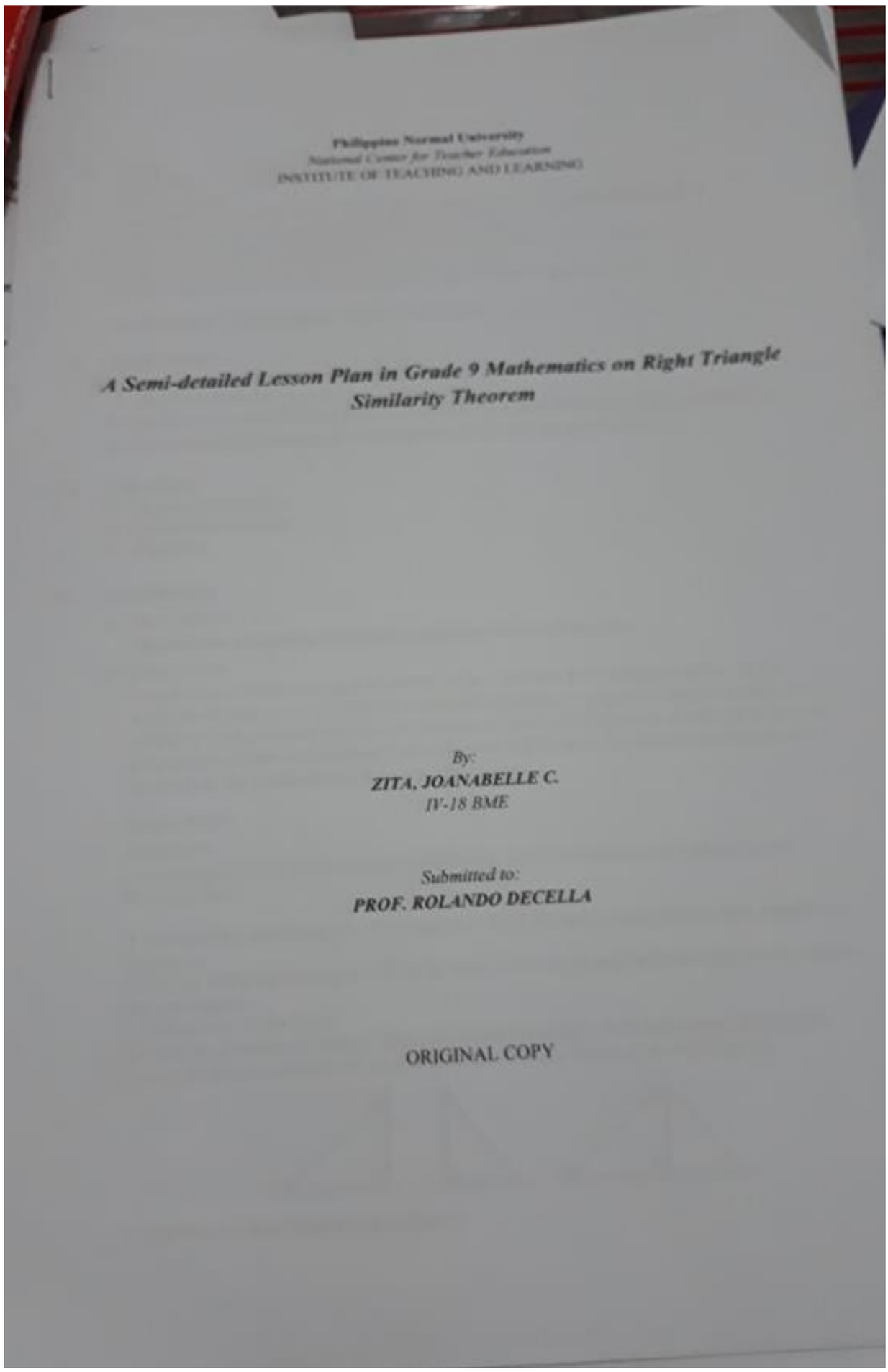
GRADE LEVEL	GRADE LEVEL STANDARDS
	10 000 000, order of operations, factors and multiples, fractions and decimals including money, ratio and proportion, percent); geometry (polygons, circles, solid figures); patterns and algebra (sequence and number sentences); measurement (time, circumference, area, volume, and temperature); and statistics and probability (tables, line graphs and experimental probability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 6	The learner demonstrates understanding and appreciation of key concepts and skills involving numbers and number sense (divisibility, order of operations, fractions and decimals including money, ratio and proportion, percent, integers); geometry (plane and solid figures); patterns and algebra (sequence, expression, and equation); measurement (rate, speed, area, surface area, volume, and meter reading); and statistics and probability (tables, pie graphs, and experimental and theoretical probability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 7	The learner demonstrates understanding of key concepts and principles of numbers and number sense (sets and real number system); measurement (conversion of units of measurement);patterns and algebra (algebraic expressions and properties of real numbers as applied in linear equations and inequalities in one variable); geometry (sides and angles of polygons); and statistics and probability (data collection and presentation, and measures of central tendency and variability) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 8	The learner demonstrates understanding of key concepts and principles of patterns and algebra (factors of polynomials, rational algebraic expressions, linear equations and inequalities in two variables, systems of linear equations and inequalities in two variables); geometry (axiomatic structure of geometry, triangle congruence, inequalities in a triangle, and parallel and perpendicular lines); and statistics and probability (probability of simple events) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 9	The learner demonstrates understanding of key concepts and principles of patterns and algebra (quadratic equations and inequalities, quadratic functions, rational algebraic equations, variations, and radicals) and geometry (parallelograms and triangle similarities and basic concepts of trigonometry) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.
GRADE 10	The learner demonstrates understanding of key concepts and principles of patterns and algebra (sequences, series, polynomials, polynomial equations, and polynomial functions); geometry (circles and coordinate geometry); and statistics and probability (combinatorics and probability, and measures of position) as applied - using appropriate technology - in critical thinking, problem solving, reasoning, communicating, making connections, representations, and decisions in real life.

Time Allotment:

Grade	1	2	3	4	5	6	7	8	9	10

K to 12 BASIC EDUCATION CURRICULUM

CONTENT	CONTENT STANDARDS	PERFORMANCE STANDARDS	LEARNING COMPETENCY	CODE	LEARNING MATERIALS
	The learner...	The learner...	The learner...		
			39. proves the conditions for similarity of triangles. *** 39.1 SAS similarity theorem 39.2 SSS similarity theorem 39.3 AA similarity theorem 39.4 right triangle similarity theorem 39.5 special right triangle theorems	**M9GE-IIIg-h-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similar Triangles, Module 2 3. APEX Math Triangles Unit 4 Lesson 1-10 Geometry Chapter 5 Similarity, 5.2.4. Basic Similarity Theorems p.157 and 5.4. Similarities in Right Triangles p.166 (LM) 4. DLM 3 – Module 17: Similar Triangles
			40. applies the theorems to show that given triangles are similar.	**M9GE-IIIi-1**	1. BEAM Third Year, Module 16 (TG) 2. EASE Module Third Year Similar Triangles, Module 2 Geometry Chapter 5 Similarity 5.2.4. Basic Similarity Theorems p.157 and 5.4. Similarities in Right Triangles p.166 (LM)
			41. proves the Pythagorean Theorem.	**M9GE-IIIi-2**	1. APEX Math Similarity of Triangles Unit 4 Lesson 11-16 Geometry Chapter 5 Similarity 5.4.2. The Pythagorean Theorem p.169



Philippine Normal University
National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING

A Semi-detailed Lesson Plan in Grade 9 Mathematics on Right Triangle Similarity Theorem

By:
ZITA, JOANABELLE C.
IV-18 BME

Submitted to:
PROF. ROLANDO DECELLA

ORIGINAL COPY

I. **TOPIC:** Triangle Similarity
SUBTOPIC: Right Triangle Similarity
REFERENCES:

Department of Education. (2014). *Grade 9 Mathematics learner's module*. Retrieved from https://www.slideshare.net/paolodagaojes/9-math-lm-u3m6v10
Moral, F. (2011). *Right triangle similarity* [PowerPoint presentation]. Retrieved from https://www.slideshare.net/teacherfidel/right-triangle-similarity
Nivera, G. & Lapinid, M., (2014), *Grade 9 Mathematics: Patterns and practicalities*

MATERIALS: Board marker, ½ index cards, scissors

II. OBJECTIVES

At the end of the period, the students are expected to:

A. ~~Manifest objectivity~~ new:
B. Apply right triangle similarity theorems in finding the missing dimensions of given triangles; and
C. Demonstrate understanding of the concepts of right triangle similarity theorem

III. STRATEGY

A. Inquiry-based learning
B. Lecture and discussion
C. Evaluation

IV. PROCEDURE

A. Daily routines

~~The students must arrange their chairs; pick up the pieces of papers,~~ etc.

B. Drill /Review

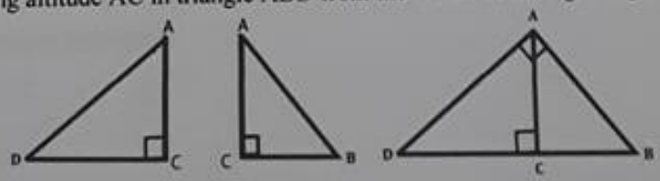
We can prove that two triangles are similar by AA, SAS and SSS similarity theorem. In AA similarity theorem, if the two pairs of corresponding angles are congruent, then the triangles are similar. In SAS similarity theorem, the triangles are similar if two pairs of corresponding sides are proportional and the included angles are congruent. In SSS similarity theorem, the triangles are similar if all the corresponding sides are proportional.

C. Lesson Proper

1. Motivation

Each pair of students will have their ½ index card, pencil, bond paper and ruler and do the following steps:

1. Cut an index card along one of its diagonals. They will determine if the two right triangles are congruent.
2. On one of the right triangles, fold at the vertex of the right angle such that parts of the opposite side are aligned.
3. Unfold and cut the crease.
4. Label the triangles as follows. This means that the triangle ACD and triangle BCA can be formed by drawing altitude AC in triangle ABD from the vertex of the right angle A



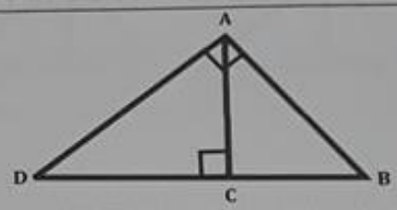
5. Examine the three right triangles closely.

Are they similar?
All right angles are congruent. Therefore, every two of the three right triangles have a pair of congruent angles.

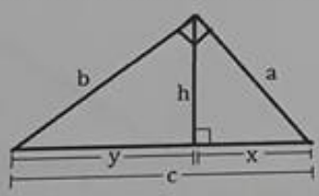
In ΔDAC, $\angle D$ is a complement of$\angle DAC$. But, $\angle DAC$ and $\angle CAB$ form a right angle (in ΔDBA). So, angle D is congruent to angle B. Through AA similarity theorem, $\Delta DAC \sim \Delta ABC$.
By reflexive property, $\angle D$ of ΔDAC is congruent to angle D of ΔDBA. Thus, by AA Similarity theorem, $\Delta DAC \sim \Delta DBA$. This leads to Right Triangle Similarity theorem.

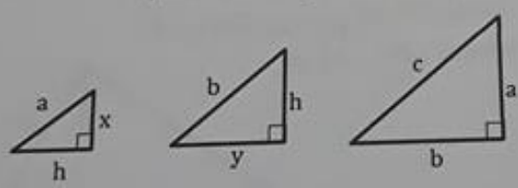
2. Presentation

SIMILARITY ON A RIGHT TRIANGLE
If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other.



If $\overline{AC} \perp \overline{BD}$, then $\Delta ABC \sim \Delta DAC \sim \Delta DBA$ in ΔABD with right angle A.
The proportions arising from the similarities in right triangles will be listed.





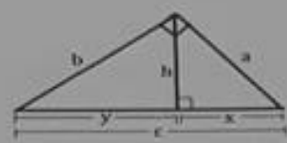
Between the small triangle and the medium triangle, $\frac{a}{b} = \frac{x}{h} = \frac{h}{y}$.

Between the medium triangle and the large triangle, $\frac{b}{c} = \frac{h}{a} = \frac{y}{b}$.

Between the small triangle and the large triangle, $\frac{a}{c} = \frac{x}{a} = \frac{h}{b}$.

Based on the preceding statements,

$\frac{x}{h} = \frac{h}{y}$ $\frac{y}{b} = \frac{b}{c}$ $\frac{x}{a} = \frac{a}{c}$



The students will justify the following sequence of statements:

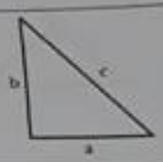
- $cx^2 = a^2$ and $cx^2 = b^2$ (Multiplication property of equality)
- $cx + cy = a^2 + b^2$ (Addition property of equality)
- $c(x + y) = a^2 + b^2$ (Distributive property of multiplication over addition or Factoring)
- $c = x + y$ (Segment Addition Postulate)
- $c^2 = a^2 + b^2$ (Substitution)

This will let them realize the proof of Pythagorean theorem.

PYTHAGOREAN THEOREM

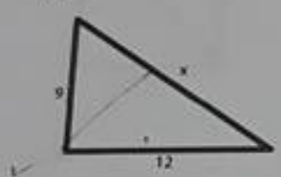
In a right triangle, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of its legs.

$$c^2 = a^2 + b^2$$



3. Application

12.



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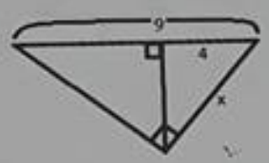

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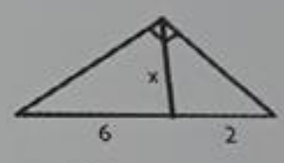

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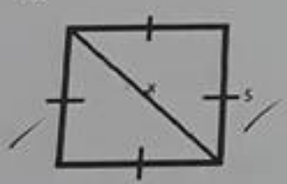

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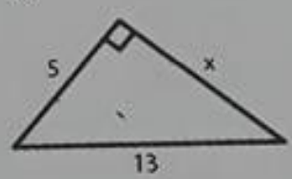


Answers:

12.

$$x^2 = 9^2 + 12^2$$
$$x^2 = 81 + 144$$
$$x^2 = 225$$
$$x = 15$$

15.

$$\frac{4}{x} = \frac{x}{9}$$
$$x^2 = 36$$
$$x = 6$$

18.

$$\frac{2}{x} = \frac{x}{6}$$
$$x^2 = 12$$
$$x = 2\sqrt{3}$$

13.

$$x^2 = 5^2 + 5^2$$
$$x^2 = 25 + 25$$
$$x^2 = 50$$
$$x^2 = 5\sqrt{2}$$

16.

$$5^2 + x^2 = 13^2$$
$$x^2 = 13^2 - 5^2$$
$$x^2 = 169 - 25$$
$$x^2 = 144$$
$$x = 12$$

4. Generalization

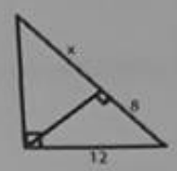
If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other. The altitude rule states that the altitude is the geometric mean between the segments into which it divides the hypotenuse. The leg rule states that each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse. In Pythagorean Theorem, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of its legs.

5. Evaluation

19.

21.

18.



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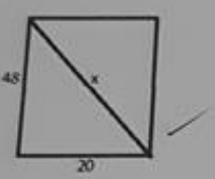

22.

Answers:

19.

$$\frac{x}{6} = \frac{6}{12}$$
$$12x = 36$$
$$x = 3$$

21.

$$x^2 + x^2 = 8^2$$
$$2x^2 = 64$$
$$x^2 = 32$$
$$x^2 = 4\sqrt{2}$$

18.

$$\frac{8}{12} = \frac{12}{x+8}$$
$$8x + 64 = 144$$
$$8x = 80$$
$$x = 10$$

21.

$$x^2 = 20^2 + 48^2$$
$$x^2 = 400 + 2304$$
$$x^2 = 2704$$
$$x = 52$$

22.

$$\frac{7}{x} = \frac{x}{7}$$
$$x^2 = 49$$
$$x = 7$$

V. AGREEMENT

Answer p. 333, items 32-36 of *Grade 9 Mathematics: Patterns and Practicalities*.

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A Semi-detailed Lesson Plan in Grade 9 Mathematics on Right Triangle Similarity Theorem

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SUBTOPIC: Right Triangle Similarity

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MATERIALS: Board marker, ½ index cards, scissors

II. OBJECTIVES

At the end of the period, the students are expected to:

A. prove that if an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other;

B. apply right triangle similarity theorems in finding the missing dimensions of given triangles; and

C. actively participate in the discussion

III. STRATEGY

A. Inquiry-based learning

B. Lecture and discussion

C. Evaluation

IV. PROCEDURE

A. Daily routines

B. Drill /Review

We can prove that two triangles are similar by AA, SAS and SSS similarity theorem. In AA similarity theorem, if the two pairs of corresponding angles are congruent, then the triangles are similar. In SAS similarity theorem, the triangles are similar if two pairs of corresponding sides are proportional and the included angles are congruent. In SSS similarity theorem, the triangles are similar if all the corresponding sides are proportional.

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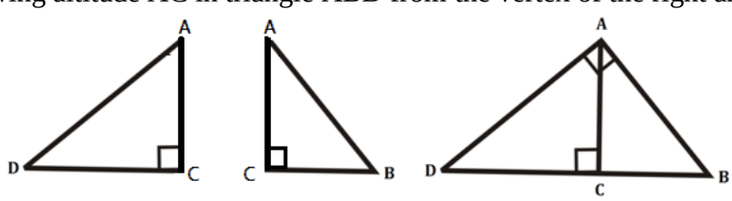
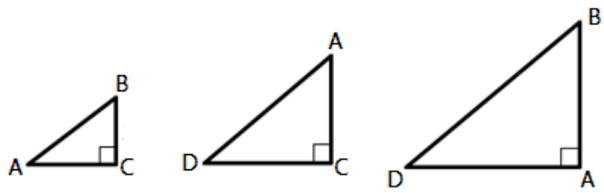
4. Label the triangles as follows. This means that the triangle ACD and triangle BCA can be formed by drawing altitude AC in triangle ABD from the vertex of the right angle A



5. Examine the three right triangles closely.



Are they similar?
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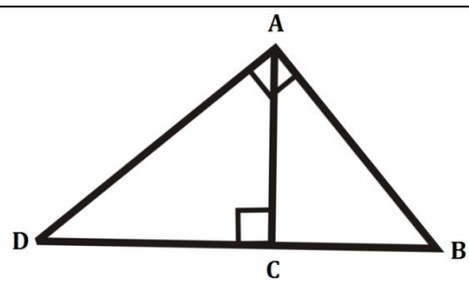
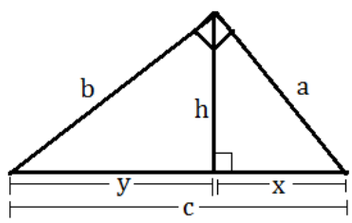
In ΔDAC, $\angle D$ is a complement of$\angle\ DAC$. But, $\angle DAC$ and $\angle CAB$ form a right angle (in ΔDBA). So, angle D is congruent to angle B. Through AA similarity theorem, $\Delta DAC \sim \Delta ABC$. By reflexive property, $\angle D$ of $\Delta DAC$is congruent to angle D of ΔDBA. Thus, by AA Similarity theorem, $\Delta DAC \sim \Delta DBA$. This leads to Right Triangle Similarity theorem.

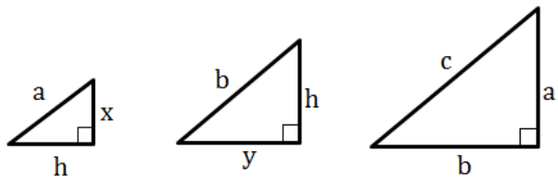
2. Presentation

SIMILARITY ON A RIGHT TRIANGLE If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other.



If $\overline{AC} \perp \overline{BD}$, then $\Delta ABC \sim \Delta DAC \sim \Delta DBA$ in ΔABD with right angle A.
The proportions arising from the similarities in right triangles will be listed.

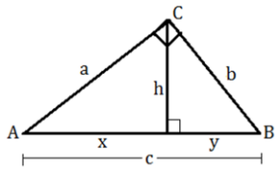




Between the small triangle and the medium triangle, $\frac{a}{b} = \frac{x}{h} = \frac{h}{y}$.
Between the medium triangle and the large triangle, $\frac{b}{c} = \frac{h}{a} = \frac{y}{b}$.
Between the small triangle and the large triangle, $\frac{a}{c} = \frac{x}{a} = \frac{h}{b}$.

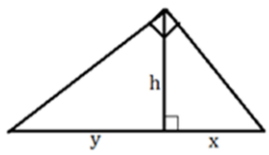
Based on the preceding statements,
$\frac{x}{h} = \frac{h}{y}$ $\frac{y}{b} = \frac{b}{c}$ $\frac{x}{a} = \frac{a}{c}$

Given a right triangle and the altitude to the hypotenuse,



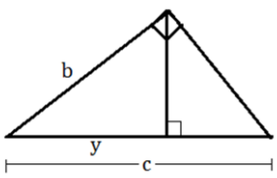
ALTITUDE RULE

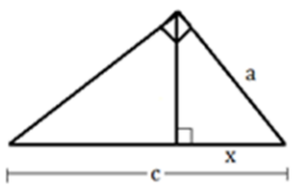
The altitude is the geometric mean between the segments into which it divides the hypotenuse.



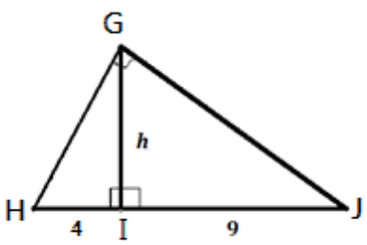
LEG RULE

Each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse.



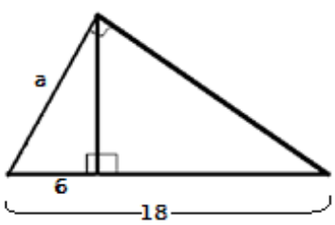


Examples:



By altitude rule,

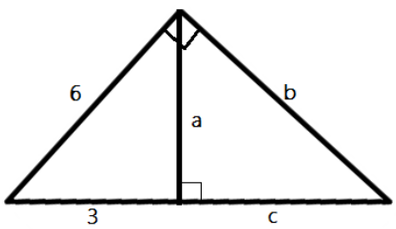
$$\frac{HI}{GI} = \frac{GI}{IJ}$$
$$\frac{4}{GI} = \frac{GI}{9}$$
$$GI^2 = 36$$
$$GI = 6$$
$$h = 6$$



By leg rule,

$$\frac{x}{a} = \frac{a}{c}$$
$$\frac{6}{a} = \frac{a}{18}$$
$$a^2 = 108$$
$$\sqrt{a^2} = \sqrt{108}$$
$$a = 6\sqrt{3}$$

3. Application



$$3^2 + a^2 = 6^2$$
$$9 + a^2 = 36$$
$$a^2 = 36 - 9$$
$$a^2 = 25$$
$$a = 3\sqrt{3}$$

$$\frac{c}{a} = \frac{a}{3}$$
$$\frac{c}{3\sqrt{3}} = \frac{3\sqrt{3}}{3}$$
$$c = 9$$

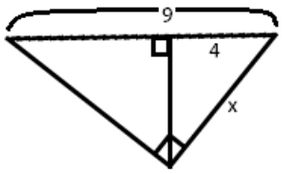
$$\frac{c}{b} = \frac{b}{c+3}$$
$$\frac{9}{b} = \frac{b}{9+3}$$
$$b^2 = 108$$
$$b = 6\sqrt{3}$$

4. Generalization

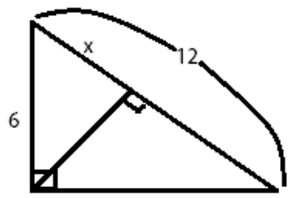
   If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other. The altitude rule states that the altitude is the geometric mean between the segments into which it divides the hypotenuse. The leg rule states that each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse.

5. Evaluation

15.



19.



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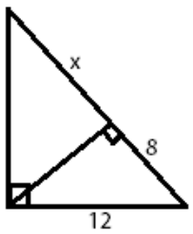
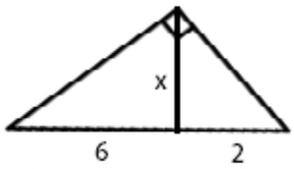
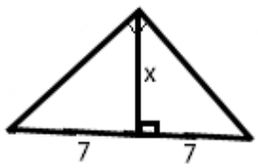


18



22.



Answers:

15.

$$\frac{4}{x} = \frac{x}{9}$$
$$x^2 = 36$$
$$x = 6$$

19.

$$\frac{x}{6} = \frac{6}{12}$$
$$12x = 36$$
$$x = 3$$

23.

$$\frac{8}{12} = \frac{12}{x+8}$$
$$8x + 64 = 144$$
$$8x = 80$$
$$x = 10$$

18.

$$\frac{2}{x} = \frac{x}{6}$$
$$x^2 = 12$$
$$x = 2\sqrt{3}$$

22.

$$\frac{7}{x} = \frac{x}{7}$$
$$x^2 = 49$$
$$x = 7$$

V. AGREEMENT

Answer p. 333, items 32-36 of *Grade 9 Mathematics: Patterns and Practicalities*.

Philippine Normal University
National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING

A Semi-detailed Lesson Plan in Grade 9 Mathematics on Altitudes of Triangles

By:
ZITA, JOANABELLE C.
IV-18 BME

Submitted to:
PROF. ROLANDO DECELLA

ORIGINAL COPY

I. **TOPIC:** Triangle Similarity
SUBTOPIC: Altitudes of Triangles
REFERENCES:

Department of Education. (2014). *Grade 9 Mathematics Learner's module*. Retrieved from https://www.slideshare.net/paolodagaojes/9-math-lm-u3m6v10
McCall, B. (n.d.). *Corresponding Parts of Similar Triangles – Concept*. Retrieved from https://www.brightstorm.com/math/geometry/similarity/corresponding-parts-of-similar-triangles/
Similar Triangles - ratios of parts. (n.d.). Retrieved from https://www.mathopenref.com/similartrianglesareas.html

MATERIALS: Board marker

II. **OBJECTIVES**

At the end of the period, the students are expected to:

A. Manifest objectivity;
B. Find the altitude of one of the two similar triangles in each given examples; and
C. Demonstrate understanding of the concepts on altitudes of triangles.

III. **STRATEGY**

A. Inquiry-based learning
B. Lecture and discussion
C. Evaluation

IV. **PROCEDURE**

A. Daily routines

~~The students must arrange their chairs; pick up the pieces~~ of papers, etc.

B. Drill /Review

If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other. The altitude rule states that the altitude is the geometric mean between the segments into which it divides the hypotenuse. The leg rule states that each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse. In Pythagorean Theorem, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of its legs.

C. Lesson Proper

1. Motivation

Altitude of a triangle is defined as a segment that intersects the vertex and the line containing the base. Altitude is also the other term of height of the triangle. Given that two triangles are similar, does this mean their corresponding altitudes are similar?

2. Presentation

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

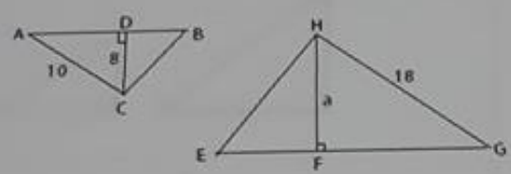
$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$

Example:

The two triangles are similar. Find h.

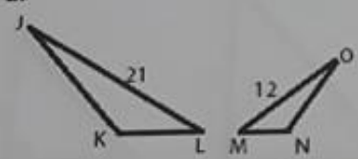
1.

$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
$$\frac{3}{9} = \frac{2}{h}$$
$$3h = 18$$
$$\boldsymbol{h = 9}$$



2.

$$\frac{AC}{HG} = \frac{8}{a}$$
$$\frac{10}{18} = \frac{8}{a}$$
$$10a = 144$$
$$\boldsymbol{a = 72/5}$$

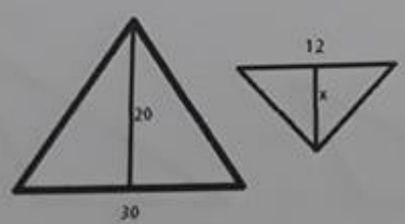


3. If the altitude of ΔJKL is 35, what is the altitude of ΔMNO?

$$\frac{AC}{HG} = \frac{8}{a}$$
$$\frac{10}{18} = \frac{8}{a}$$
$$10a = 144$$
$$\boldsymbol{a = 72/5}$$

3. Application

Each given pair of triangles is similar. Find the unknown dimensions in each item.



1.

$$\frac{30}{12} = \frac{20}{x}$$
$$30x = 240$$
$$\boldsymbol{x = 8}$$

2.

$$\frac{IJ}{LM} = \frac{HI}{KL}$$
$$\frac{27}{21} = \frac{18}{x}$$
$$27x = 378$$
$$x = 14$$

3.

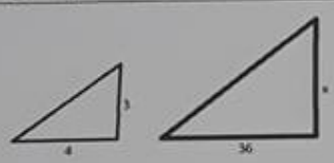
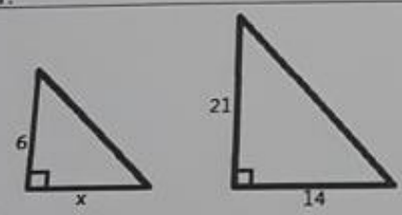
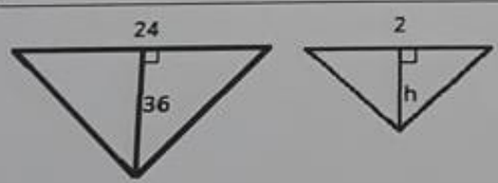
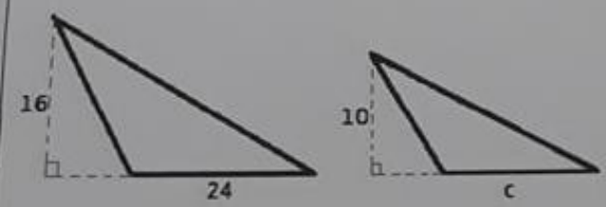
$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
$$\frac{26}{a} = \frac{16}{24}$$
$$16a = 604$$
$$a = 39$$

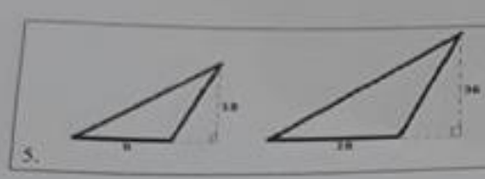
4. Generalization

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

5. Evaluation

Each given pair of triangles is similar. Find the unknown value of the following:

1. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{4}{36} = \frac{3}{x}$ $4x = 108$ $x = 27$
2. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{x}{14} = \frac{6}{21}$ $21x = 84$ $x = 4$
3. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{24}{2} = \frac{36}{h}$ $24h = 72$ $h = 3$
4. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{24}{c} = \frac{16}{10}$ $16c = 240$ $c = 15$

5. 	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{b}{28} = \frac{18}{36}$ $36b = 504$ $b = 14$

V. AGREEMENT

If two triangles are similar, does this mean that their medians are similar? How?

Philippine Normal University
National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING

A Semi-detailed Lesson Plan in Grade 9 Mathematics on Altitudes of Triangles

By:
ZITA, JOANABELLE C.
IV-18 BME

Submitted to:
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REVISED COPY

VI. TOPIC: Triangle Similarity
SUBTOPIC: Altitudes of Triangles
REFERENCES:

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Similar Triangles - ratios of parts.(n.d.). Retrieved from https://www.mathopenref.com/similartrianglesareas.html

MATERIALS: Board marker

VII. OBJECTIVES

At the end of the period, the students are expected to:

D. prove that if two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles;
E. find the altitude of one of the two similar triangles in each given examples; and
F. actively participate in the discussion.

VIII. STRATEGY

D. Inquiry-based learning
E. Lecture and discussion
F. Evaluation

IX. PROCEDURE

D. Daily routines

E. Drill /Review

If an altitude is drawn to the hypotenuse of a right triangle, then the new triangles formed are similar to the given triangle and to each other. The altitude rule states that the altitude is the geometric mean between the segments into which it divides the hypotenuse. The leg rule states that each leg of the right triangle is the geometric mean between the hypotenuse and its projection on the hypotenuse. In Pythagorean Theorem, the square of the length of the hypotenuse is equal to the sum of the squares of the lengths of its legs.

F. Lesson Proper

6. Motivation

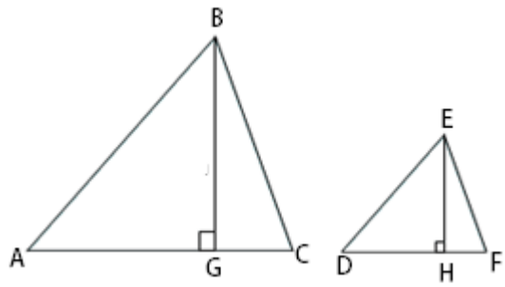
Altitude of a triangle is defined as a segment that intersects the vertex and the line containing the base. Altitude is also the other term of height of the triangle. Given that two triangles are similar, does this mean their corresponding altitudes are similar?

7. Presentation

Answer the following:

j. What are the conditions of similar triangles?

k. Given $\Delta ABC \sim \Delta DEF$, state the congruence of their corresponding angles and proportionality of their corresponding sides.



l. Draw the altitudes of the triangles. (Let's say BG and EH)

m. State the congruence of one pair of corresponding angles.

n. Are the angles formed by the altitude and base congruent? Why?

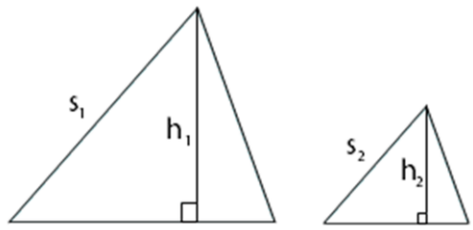
o. Does this imply $\Delta BGA \sim \Delta EHD$ or $\Delta BGC \sim \Delta EHF$? Why?

p. Does this imply that $\frac{BG}{EH} = \frac{BC}{EF} = \frac{AB}{DE}$? Why?

q. Does this also imply that $\frac{BG}{EH} = \frac{AC}{DF}$?

r. Then, what does this imply to the ratio of the altitudes and the ratio of the corresponding sides?

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

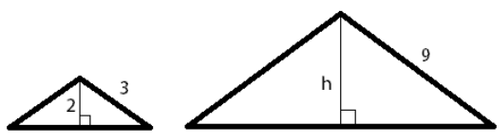


$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$

Example:

The two triangles are similar. Find *h*.

4.



$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
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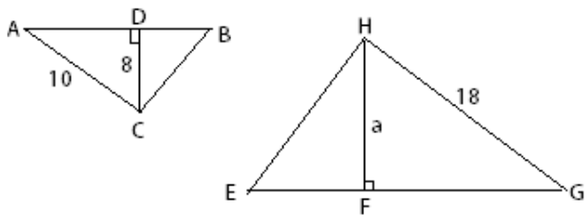
$$3h = 18$$
$$\boldsymbol{h = 9}$$

5.



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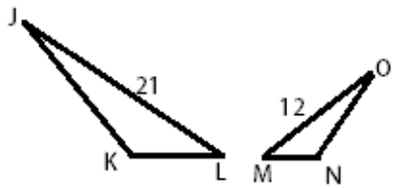

6. If the altitude of ΔJKL is 35, what is the altitude of ΔMNO?

$$\frac{AC}{HG} = \frac{8}{a}$$
$$\frac{10}{18} = \frac{8}{a}$$
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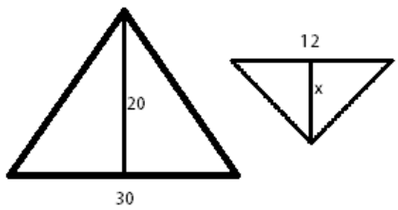
8. Application

Each given pair of triangles is similar. Find the unknown dimensions in each item.



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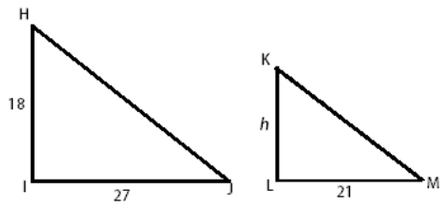

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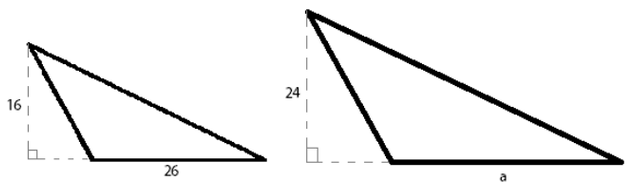


6.

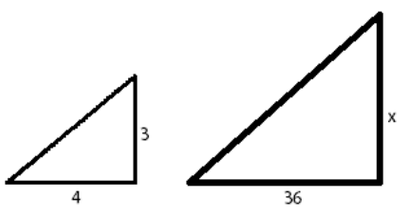
$$\frac{s_1}{s_2} = \frac{h_1}{h_2}$$
$$\frac{26}{a} = \frac{16}{24}$$
$$16a = 604$$
$$\boldsymbol{a = 39}$$

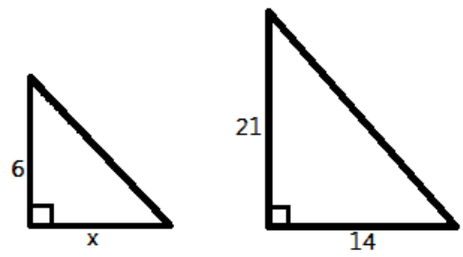
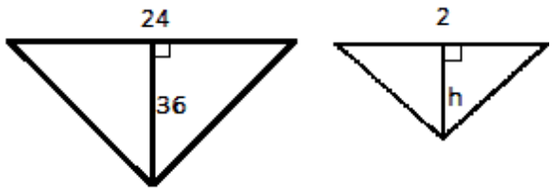
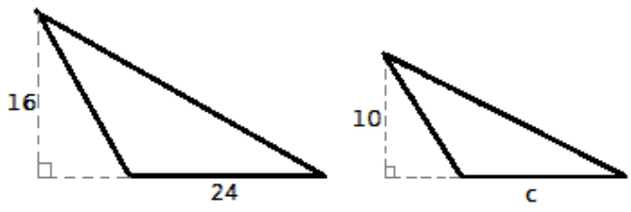
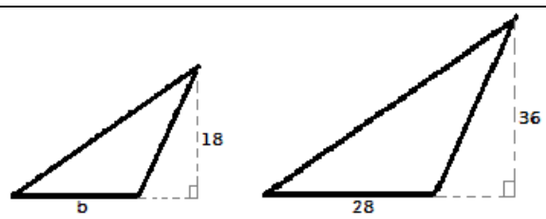
9. Generalization

If two triangles are similar, then the ratio of corresponding sides is equal to the ratio of the altitudes of the two triangles.

10. Evaluation

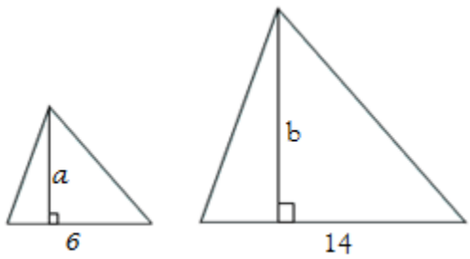
Each given pair of triangles is similar. Find the unknown value of the following:

 2.	$\frac{s_1}{s_2} = \frac{h_1}{h_2}$ $\frac{4}{36} = \frac{3}{x}$ $4x = 108$ $x = 27$

2. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{x}{14}=\frac{6}{21}$ $21x=84$ $x=4$
3. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{24}{2}=\frac{36}{h}$ $24h=72$ $h=3$
4. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{24}{c}=\frac{16}{10}$ $16c=240$ $c=15$
5. 	$\frac{s_1}{s_2}=\frac{h_1}{h_2}$ $\frac{b}{28}=\frac{18}{36}$ $36b=504$ $b=14$

X. AGREEMENT

Given that these triangles are similar, find possible values of a and b. *You can enumerate as many as possible.*



Philippine Normal University
The National Center for Teacher Education
COLLEGE OF TEACHER DEVELOPMENT
Taft Avenue, Manila

CTD Form No. 4 – Teaching Observation Form

TEACHING OBSERVATION FORM

Name: JOANABELLE C. ZITA
Subject Taught: MATHEMATICS
Faculty of Science, Technology and Mathematics

Date: Dec. 7, 2017
Year & Section: IV-12

Criteria	5	4	3	2	1
A. Personal Appearance					
1. Properly groomed and well-poised		✓			
2. Free of mannerisms		✓			
3. Pleasant disposition		✓			
B. Language					
1. Good diction and clear enunciation		✓			
2. Well-projected voice		✓			
C. Lesson Planning					
1. Prepared relevant and appropriate learning tasks and activities			✓		
2. Good pacing of activities			✓		
3. Well-planned and well executed strategies			✓		
D. Instructional Materials					
1. Appropriate for the given activities			✓		
2. Show the teacher's creativity and resourcefulness			✓		
3. Utilized properly and effectively			✓		
E. Classroom Management					
1. Handles disciplinary problems effectively			✓		
2. Motivates and keeps students' attention and interest			✓		
F. Directing Teaching-Learning Situation					
1. Makes effective introduction and motivation			✓		
2. Gives clear directions and logical explanations			✓		
3. Has mastery of the subject matter			✓		
4. Asks appropriate and different types of questions			✓		
5. Focuses students' attention to important points in the lesson			✓		
6. Handles wrong answers tactfully			✓		
7. Conducts written evaluation efficiently			✓		
Total		72	84		
Final Rating		(88)			

Comments and Suggestions:

1. Come an overview for drill or review
2. Make the student participate in the discussion.
3. Present the lesson very neat, and let the student understand it.
4. Give a variety of exercises.
5. Congratulations!

Observer: _____

Transmutation for Teaching Observation

100 96	95
91 95	93
86 90	91
81-85	88
76 80	85
71-75	83
66 70	81
61-65	80
56 60	77
50 55	75

Philippine Normal University
The National Center for Teacher Education
COLLEGE OF TEACHER DEVELOPMENT
Taft Avenue, Manila

CTD Form No. 4 - Teaching Observation Form

TEACHING OBSERVATION FORM

Name: JOANABELLE C. ZITA
Subject Taught: MATHEMATICS
Faculty of: Science, Technology and Mathematics

Date: Dec. 8, 2017
Year & Section: IV-12 BSME

Criteria	5	4	3	2	1
A. Personal Appearance					
1. Properly groomed and well-poised		✓			
2. Free of mannerisms		✓			
3. Pleasant disposition		✓			
B. Language					
1. Good diction and clear enunciation		✓			
2. Well-projected voice		✓			
C. Lesson Planning					
1. Prepared relevant and appropriate learning tasks and activities		✓			
2. Good pacing of activities		✓			
3. Well-planned and well executed strategies		✓			
D. Instructional Materials					
1. Appropriate for the given activities		✓			
2. Show the teacher's creativity and resourcefulness		✓			
3. Utilized properly and effectively		✓			
E. Classroom Management					
1. Handles disciplinary problems effectively		✓			
2. Motivates and keeps students' attention and interest		✓			
F. Directing Teaching-Learning Situation					
1. Makes effective introduction and motivation		✓			
2. Gives clear directions and logical explanations		✓			
3. Has mastery of the subject matter		✓			
4. Asks appropriate and different types of questions		✓			
5. Focuses students' attention to important points in the lesson		✓			
6. Handles wrong answers tactfully		✓			
7. Conducts written evaluation efficiently		✓			
Total		24	57	83	
Final Rating		(88)			

Comments and Suggestions:

1. You should add straight line in drawing a Triangle.
2. Please your lesson clearly and understandable.
3. Give more variety of exercise in your lesson plan.
4. Nice job! Congratulation.

Observer: _____

Transmutation for Teaching Observation

100 96	95
91-95	93
86 90	91
81-85	88
76 80	85
71-75	83
66 70	81
61-65	80
56 60	77
50 55	75

DOMAIN 5 ASSESSMENT AND REPORTING

Strands:

1. Design, selection, organization and utilization of assessment strategies
2. Monitoring and evaluation of learner progress and achievement
3. Feedback to improve learning
4. Communication of learner needs, progress and achievement to key stakeholders
5. Use of assessment data to enhance teaching and learning practices and programs

REFLECTIONS

In making criteria for grading projects, the first thing you should consider is the objective of the project.

Tracking the students' performance really helped me to plan my lessons. If most of the scores are low, this is the cue that I need to lower the difficulty of the lesson the students would better understand. If most of the scores are high, this is the cue that I will make my lessons more challenging.

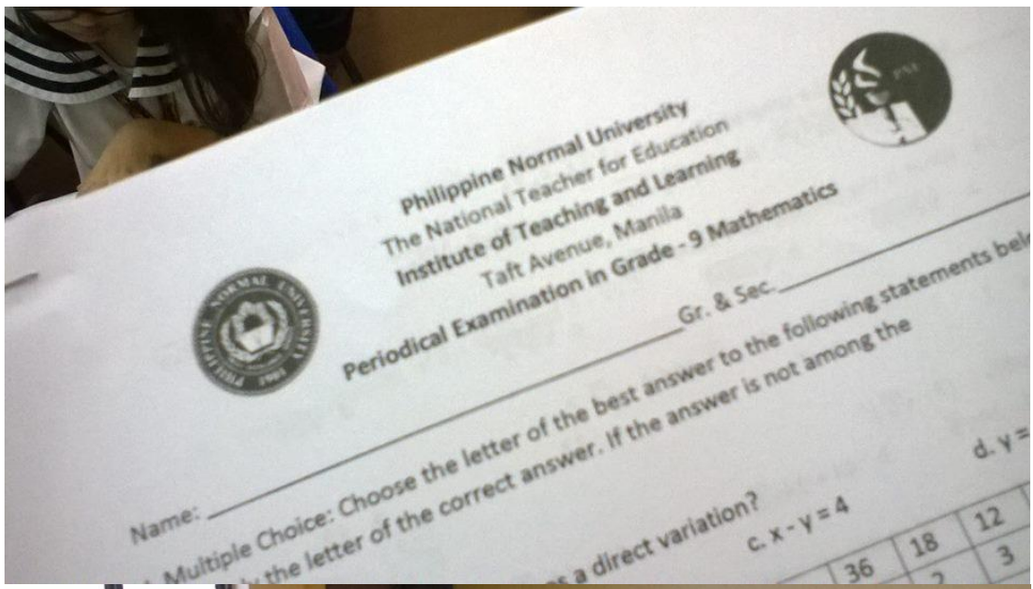
Giving tests is not just for making grades. Aside from consulting their performance for planning lessons, it is important to give feedback so that they improve learning through correcting their mistakes and study the concepts that they really need to master.

Based on the scores obtained by the students, this should be properly communicated to key stakeholders such as supervisor, advisers and others so that they will know the students' needs, progress and achievement.

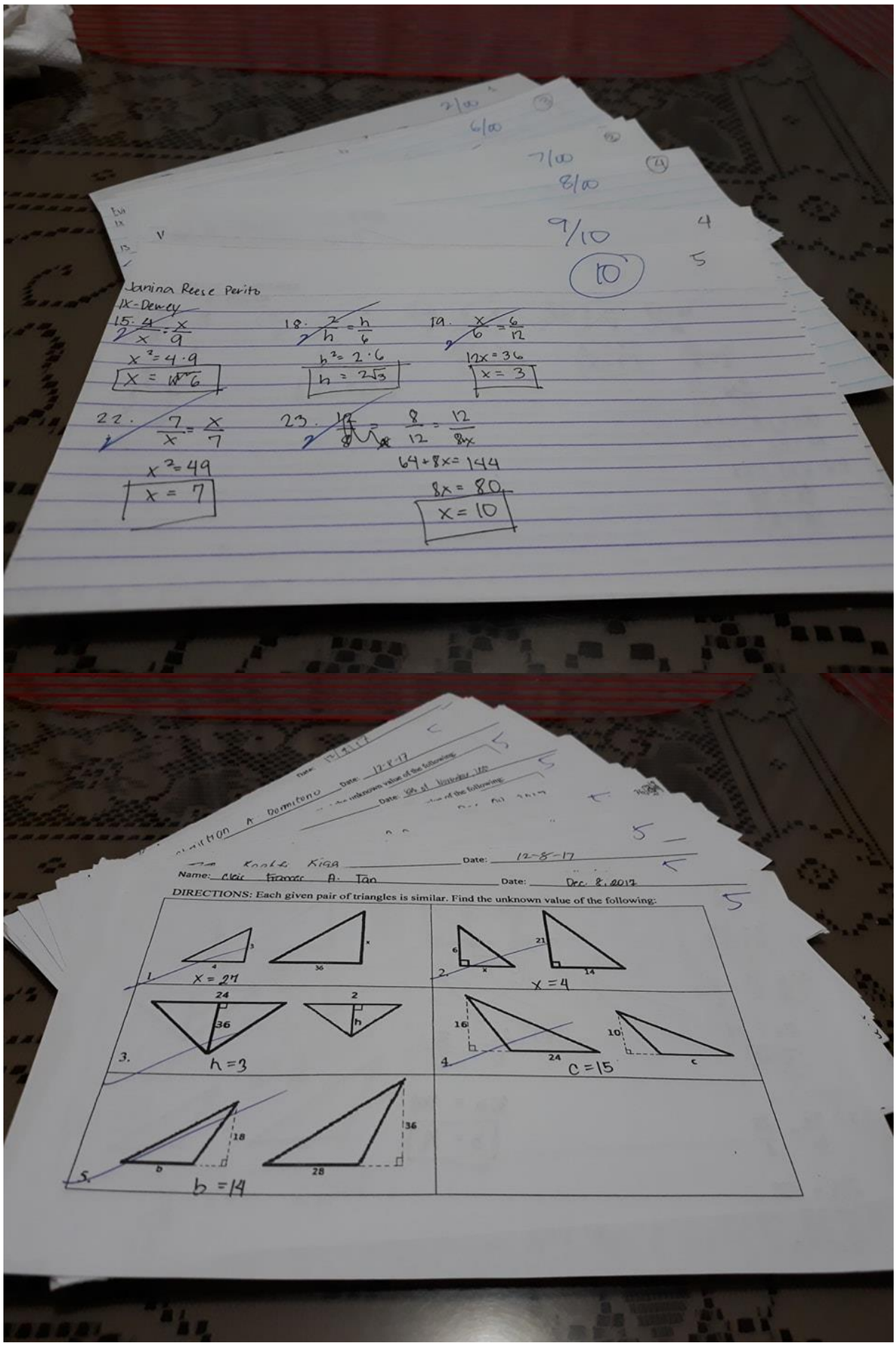
In the use of assessment data, it would also help me to know the lessons that are needed for remediation. I can plan which lessons I need to include in the tutorial program of a particular student.

EVIDENCES

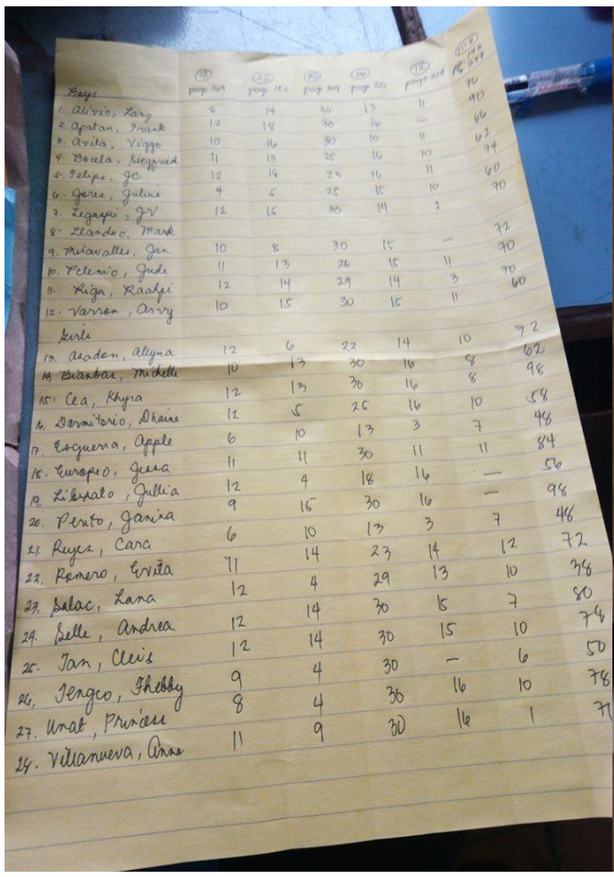
Periodical test administration (October 24, 2017)

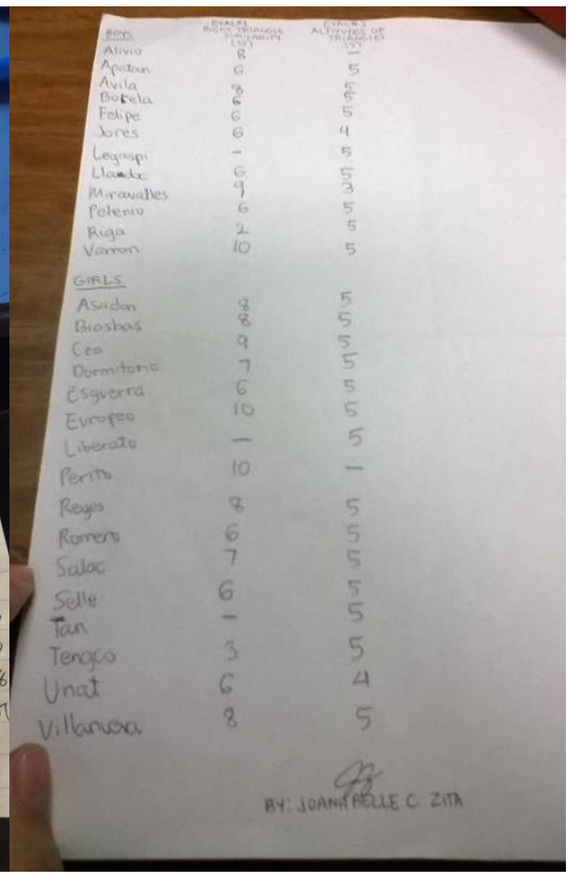


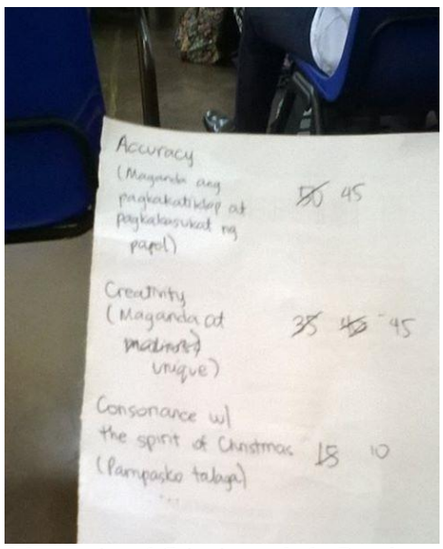
Evaluation from my Demonstration Teaching



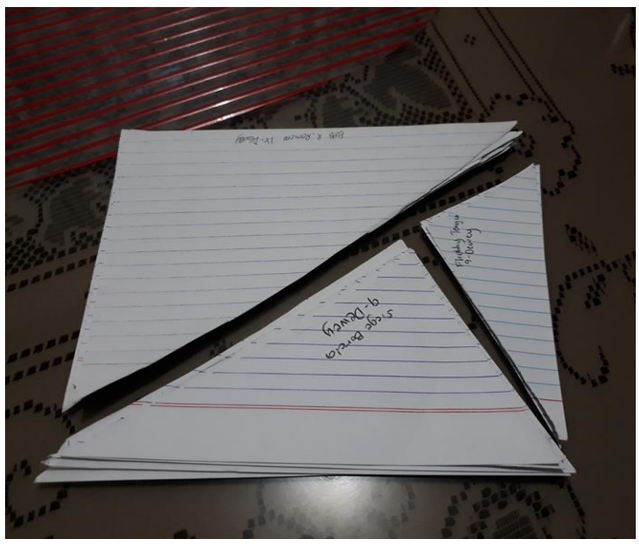
Record of Students' Scores in Evaluations and Examinations







Manuscript of Criteria made for Parol Making Project



Students' output on the first day of Demonstration Teaching

Students' scores from the evaluation of us practice teachers on the class record

Philippine Normal University
National Center for Teachers Education
Institute of Teaching and Learning
Unit Test in Mathematics 9

Name: _____ Date: _____
Year & Section: _____ Score: _____

I. Multiple Choice
Directions: Read and analyze each question carefully. Write the letter of the correct answer on the space provided before the item number.

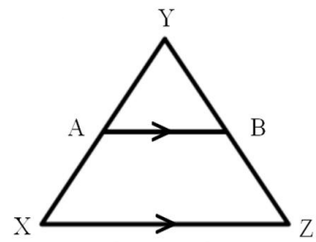
_____ 1. Which of the following is a proportion?
a. $5:8 = 15:25$ c. $18:30 = 3:5$
b. $12:10 = 6:20$ d. $2:13 = 7:39$

_____ 2. Mathematics textbook for Class VI has 320 pages. The chapter 'symmetry' runs from page 261 to page 272. The ratio of the number of pages of this chapter to the total number of pages of the book is
a. 11 : 320 b. 3 : 80 c. 3 : 40 d. 272 : 320

____ 3. The earth rotates $360°$ about its axis in about 24 hours. By how much degree will it rotate in 2 hours?
a. 30^{o} b. 60^{o} c. 15^{o} d. 90^{o}

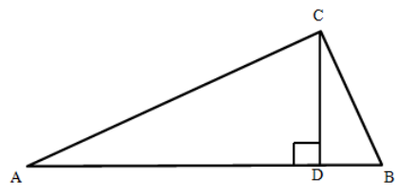
_____ 4. Given the figure, which is/are the correct proportion/s?

i. $\frac{YA}{YX} = \frac{YZ}{YB}$
ii. $\frac{YB}{YZ} = \frac{YA}{YX}$
iii. $YB:BA = YA:AB$



a. i only b. i and ii c. ii only d. ii and iii

_____ 5. Given the right triangle ABC, with altitude drawn from vertex C to point D, which among the triangles were said to be similar triangles?

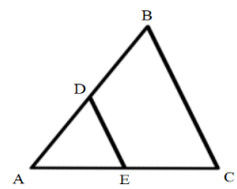


a. ΔABC, ΔCBD and ΔACD c. ΔCBD and ABC only
b. ΔACD and ΔCBD only d. None of the triangles are similar

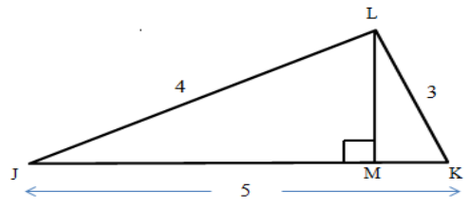
_____ 6. The ratio of the number of Math and Science books in a library is 4:5, respectively. If there are 1200 Math books, find the number of Science books.
a. 6000 b. 1000 c. 1500 d. 2500

_____ 7. Given that $\overline{AB}$ measures 35cm and $\overline{EC}$ measures 16cm with $\overline{DB}$ measuring 15cm, what is the value of $\overline{AC}$?

a. 22cm c. 26cm
b. 24cm d.28cm



For numbers 8 and 9, refer to the picture below.



_____ 8. Given the right triangle JKL, with altitude drawn from vertex L to point M, what is the measure of segment JM?

a. $\frac{9}{5}$ b. $\frac{13}{5}$ c. $\frac{12}{5}$ d. $\frac{16}{5}$

_____ 9. Given the right triangle JKL, with altitude drawn from vertex L to point M, what is the measure of altitude LM?

a. $\frac{9}{5}$ b. $\frac{13}{5}$ c. $\frac{12}{5}$ d. $\frac{16}{5}$

_____ 10. How high up the wall will a 7 meter ladder touch if the foot of the ladder is placed 2 meters from the wall?

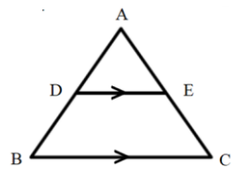
a. $3\sqrt{5}$ m b. $5\sqrt{3}$ m c. $2\sqrt{5}$ m d. $4\sqrt{2}$ m

_____ 11. Which of the following is equivalent form of the proportion $\frac{m}{n} = \frac{o}{p}$?

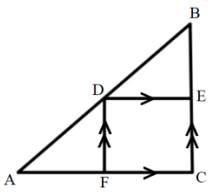
a. $mn = op$
b. $\frac{m-n}{n} = \frac{o+p}{p}$
c. $\frac{m-n}{n} = \frac{o-p}{p}$
d. $\frac{m}{n} = \frac{p}{o}$

_____ 12. Which triangle satisfies the following conditions: $m < ADE = m < ABC$ and $\frac{AD}{DE} = \frac{BA}{BC}$?

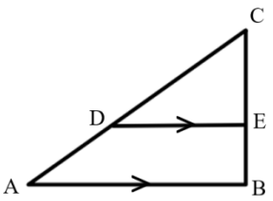
a.



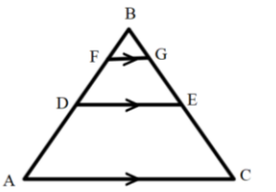
b.



b.



d.



_____ 13. In a non-isosceles right triangle, where an altitude was drawn from the 90-degree vertex. The altitude is the mean proportion of the segments of the hypotenuse which is the _____ of the smaller triangle.

a. shorter leg
b. longer leg
c. hypotenuse
d. none of the above

_____ 14. If $\frac{a}{b} = \frac{c}{d}$ is a proportion, then which of the following statement is correct?

a. $\frac{b}{a} = \frac{c}{d}$ is a proportion by upside-down property.

b. $\frac{a+b}{a} = \frac{d+b}{c}$ is a proportion by denominator addition property.

c. $\frac{a+b}{b} = \frac{c+d}{d}$ is a proportion by denominator addition property.

d. $\frac{a-b}{a} = \frac{c-b}{d}$ is a proportion by denominator subtraction property.

_____ 15. If $\overline{DE}$ and $\overline{BC}$ are parallel lines in ΔABC, then which of the following statements are correct?

i. AD:DB = AE:BC

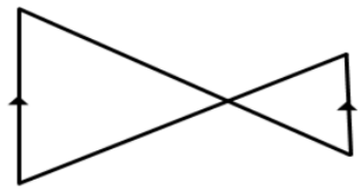
ii. $\frac{AB}{AD} = \frac{AC}{AE}$

iii. $\frac{AD+DB}{DB} = \frac{EC+EA}{EA}$

a. i only b. ii only c. i and ii d. ii and iii

_____ 16. Determine if the triangles are similar. If so, state the similarity postulate or theorem.

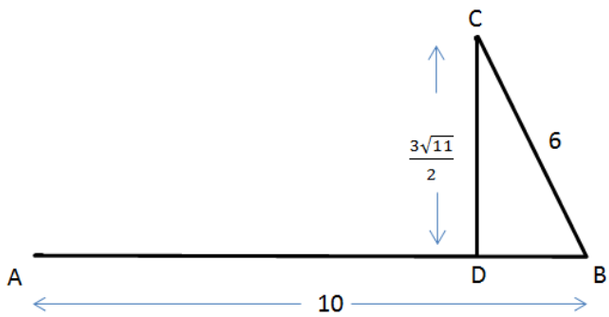
a. Yes, by AA Similarity Theorem
b. Yes, by SSS Similarity Theorem
c. Yes, by SAS Similarity Theorem
d. The triangles are not similar



_____ 17. James has to go to school but since he is already late in the class, he has to choose a shorter way to get there. The first way he can choose is walking from Masilao St. with a distance of 3km going through East. Then, walk another 4km northward to be able to get there.

a. 13 km b. 6 km c. 5 km d. 15 km

_____ 18. Mr. Farmer would like to fence his triangular cropland. He was able to fence his farm from points A to B, 10 units and points B to C, 6 units. If he has a straight path from point C to D which measures $\frac{3\sqrt{11}}{2}$ units, what is the lacking measurement (side AC) to completely fence his cropland?



a. 7 units b. 8 units c. 5 units d. 9 units

_____ 19. Choose the correct length of the sides of a triangle with the scale of 2 if the original lengths of the sides are 8 cm, 6 cm and 9 cm, respectively.

a. 10 cm, 8 cm and 11 cm
b. 64 cm, 36 cm and 81 cm
c. 16 cm, 12 cm and 18 cm
d. 12 cm, 16 cm and 18 cm

_____ 20. James has to go to school but since he is already late in the class, he has to choose a shorter way to get there. The first way he can choose is walking from Masilao St. with a distance of 3km going through East. Then, walk another 4km northward to be able to get there.

a. 13 km b. 6 km c. 5 km d. 15 km

II. Problem Solving

Directions: Solve the following problems. Show your solution.

21. Solve the proportion.

$$\frac{2x-3}{x+1}=\frac{3}{4}$$

22. Of the 288 persons working in a company, 112 are men and the remaining are women. Find the ratio of the number of

(a) men to that of women.

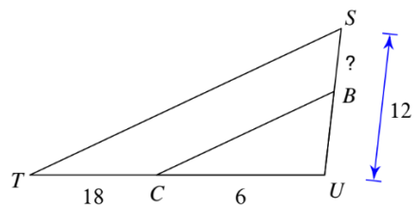
(b) men to the total number of persons.

(c) women to the total number of persons.

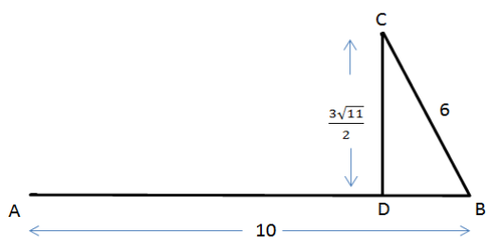
23. Apple and Banana had a racing game on their triangular land where they both must run 260 meters. The distance of the land from the base to the finish point is 240 meters. While Banana is running, he sprained his ankle and fell. Now, Banana needs Apple's help. What is the shortest distance that Apple must travel to get to Banana if they are both 130 meters away from the finishing point?

24. Find the missing length in the given figure below.

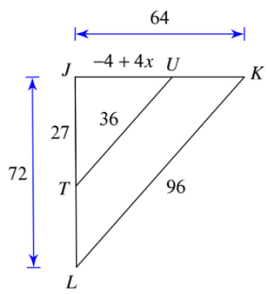
Segment SB = _____



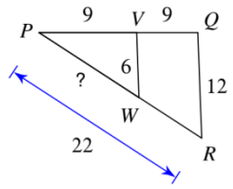
25. Mr. Farmer would like to fence his triangular cropland. He was able to fence his farm from points A to B, 10 units and points B to C, 6 units. If he has a straight path from point C to D which measures $\frac{3\sqrt{11}}{2}$ units, what is the lacking measurement (side AC) to completely fence his cropland?



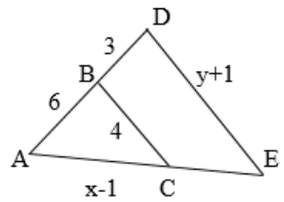
26. Solve for x.



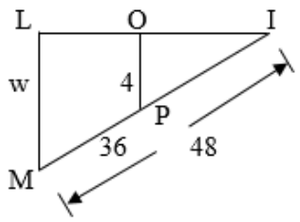
27. Solve for x



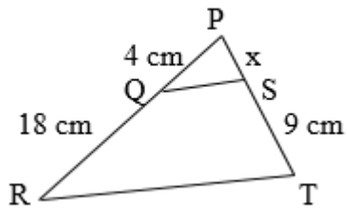
28. Solve for x and y.



29. In triangle LIM with OP | | LM, PM = 36 inches (in), IM = 48 in and OP = 4 in. Find LM.



30. In triangle PRT, QS | | RT, PQ = 4 cm, QR = 18 cm, and ST = 9 cm. Find PS.



Answer Key:

1. C
2. A
3. A
4. C
5. A
6. C
7. B
8. B
9. C
10. A
11. C
12. A
13. B
14. C
15. B
16. A
17. C
18. B
19. C
20. C
21. 3
22. A) 7:11 B) 19:36 C) 11:18
23. 50 meters
24. 9
25. 8 units
26. 7
27. 11
28. x=11, y=5
29. LM= 12 inches
30. PS= 2 cm

Periodical Examination in Grade 9 Mathematics

Table of Specifications

Content	Test Objectives	No. of minutes the teacher discussed the topic	No. of items	Levels of behavior, item format, number and placement					
	The learner			Remembering	Understanding	Applying	Analyzing	Evaluating	Creating
Patterns and Algebra	writes expressions with rational exponents as radicals and vice versa.	60	1		I. #1 (alternative response)				
	understands the laws of radicals.	60	2	I. #10 (alternative response)					
	simplifies radical expressions using the laws of radicals.	60	1			V. #1 (Multiple Choice)			
	performs operations on radical expressions.	240	1			V. #2 (Multiple Choice)			
	solves equations involving radical expressions.	30	2				V. #3 (Multiple Choice)		
	solves problems involving radicals.	30	3			V. #5 (Multiple Choice)	V. #4 (Multiple Choice)	V. #6 (Multiple Choice)	
Geometry		60	1	I. #2					

	identifies quadrilaterals that are parallelograms.			(alternative response)					
	determines the conditions that guarantee a quadrilateral a parallelogram.	60	2						
	uses properties to find measures of angles, sides and other quantities involving parallelograms.	60	4	II. #8 (supply test) I. #3 (alternative response)	I. #6 (alternative response)		V. #8 (Multiple Choice)		
	proves theorems on the different kinds of parallelogram (rectangle, rhombus, square).	60	4	II. #5 (supply test)	II. #7 (supply test) I. #5 (alternative response)				
	proves the Midline Theorem.	60	1		II. #8 (supply test)				
	proves theorems on trapezoids and kites.	60	3		I. #4 (alternative response)		V. #7 (Multiple Choice)		
	solves problems involving parallelograms, trapezoids and kites.	60	2						
	describes a proportion.	60	2		II. #3 (supply test)	II. #2 (supply test)			
		60	1		I. #7				#2

	applies the fundamental theorems of proportionality to solve problems involving proportions.				(alternative response)				(essay)
	solves problems involving similarity of figures.	60	2	I. #9 (alternative response)					
	understands and proves the conditions for similarity of triangles - SAS similarity theorem, SSS similarity theorem, AA similarity theorem, right triangle similarity theorem, and special right triangle theorems	120	4		I. #6 (alternative response) II. #4 (supply test)				#1 (essay) #3 (essay)
	applies the theorems to show that given triangles are similar.	120	2			V. #10 (Multiple Choice)			
	proves the Pythagorean Theorem.	60	2		II. #9 (supply test) II. #10 (supply test)				
	solves problems that involve triangle similarity and right triangles.	120	3			V. #9 (Multiple Choice)			

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Philippine Normal University
The National Center for Teacher Education
Institute of Teaching and Learning
Taft Ave, Manila
Periodical Examination in Grade 9 Mathematics

Name:_____ Gr. & Sec. _____

I. TRUE OR FALSE

Directions: Write TRUE if the statement is always true, otherwise, write FALSE.

1. $(64)^{3/4}$ when written in radical form has an index of 3.
2. A quadrilateral that has a pair of parallel sides is a parallelogram.
3. In any rectangle ABCD, $m\angle ABD$ is equal to $45°$.
4. In a parallelogram ABCD, AC is congruent to BD if m∠ABC=90.
5. The diagonals of parallelogram ABCD form four right angles.
6. If kite LOVE is formed out of rectangle HART, then they have the same area but different perimeters.
7. Given $\frac{a}{b} = \frac{x}{y}$, then we can say that $\frac{a}{y}$ is equal to $\frac{x}{b}$.
8. If the diagonals of a trapezoid are congruent, then the trapezoid is isosceles.
9. All similar triangles are congruent.
10. Radical numbers with the same index are like radicals.

II. IDENTIFICATION

Directions: Write on your answer sheet the word or phrase that is best described by each statement.

1. The product rule states that $a^m \times a^n$ is equal to _____.
2. The diagonals of a parallelogram intersect at their _____.
3. A four-sided plane figure having two pairs of parallel opposite sides and its diagonals are perpendicular bisectors to each other is a _____.
4. A parallelogram that has four congruent sides is called _____.
5. The segment that joins the midpoint of the legs of a trapezoid is called the _____.
6. x and y in the proportion x:g = h:y are called _____.
7. It is the statement of relationship between two or among variables.
8. If in ΔABC andΔXYZ, where $\angle B$ and $\angle Y$ are congruent, the ratio of $\overline{AB}$ to $\overline{XY}$ is proportional to the ratio of $\overline{BC}$ to $\overline{YZ}$ illustrates _____ similarity theorem.
9. Pythagorean theorem states that in a right triangle, the area of the square attached to the _____ is equal to the _____ of the areas of the squares attached to the legs.

III. MULTIPLE CHOICE TEST

Directions: Write the letter of the best answer on the space provided.

___1. Which of the following expressions is **not** equivalent to $\sqrt[7]{d^{\frac{4}{3}}}$?

a. $\left(d^{\frac{4}{3}}\right)^{\frac{1}{7}}$ c. $\left(d^{\frac{4}{3}}\right)^{-7}$

b. $\left(d^{\frac{1}{7}}\right)^{\frac{4}{3}}$ d. $\frac{1}{\left(d^{\frac{4}{3}}\right)^{\frac{-1}{7}}}$

___2. Which of the following is the quotient of $\sqrt{x} + 1$ and $\sqrt{x} - 1$?

a. $\frac{x+2\sqrt{x}-1}{\sqrt{x}-1}$ c. $\frac{x+2\sqrt{x}+1}{x-1}$

b. $\frac{x+2\sqrt{x}}{x}$ d. -1

___3. If $3+\sqrt{x+1} = 4$, then $(x+1)^2$ is equal to _____.

a. 0 or 2304 c. 1 or 2401

b. 0 or 576 d. 1 or 576

___4. The cost C (in pesos) per unit item of a company is given by the formula

C = $(1.8)\sqrt{1000-n}$ where n is the number of items produced. If the cost per unit item is Php 36, which of the following is the number of items produced?

a. 400 c.600

b. 500 d. 700

___5. Maui decided to cut across a rectangular garden by crossing a diagonal path that cuts through the garden. If the north side of the garden measures 30 feet and the west side of the garden measures 40 feet, how much less did Maui walk by using the diagonal path than by walking along the sides of the garden?

a. 10 ft c.30 ft

b. 20 ft d. 40 ft

___6. The number of bacteria in a dish after disinfection can be modeled by the equation y = $5500\sqrt{0.025x+0.1}$ where x is the number of minutes past. At what time are there 3000 bacteria left in the dish?

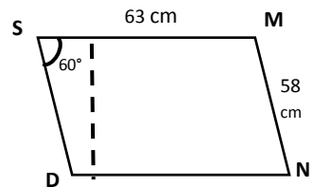
a. 5.9 minutes later c. 7.9 minutes later

b. 6.9 minutes later d. 8.9 minutes later

___7. The bases of a trapezoid measures (x-14) in and (x+2) in. If its midsegment is 30 in long, how long is the longer base of the trapezoid?

a. 22 in c.38 in

b. 36 in d. 76 in

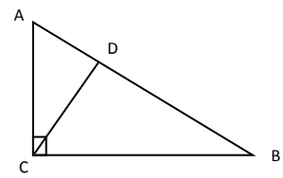


___8. What is the area of the parallelogram MNDS?

a.1287 cm^2 c.1287 $\sqrt{3}cm^2$

b.1827cm^2 d.1827 $\sqrt{3}cm^2$

___9. Which similarity statement refers to the triangles given?



a. △ACD ~ △ACB c. △ABC ~ △CDB

b. △CDB ~ △ADC d. △ABC ~ △ADC

___10. A house cast a shadow of 4.8 m long. At the same time, a tree casts a shadow 2.0 m long. If the tree is 3.6 m high, how tall is the house?

a. 10.26 m c. 6.26 m

b. 8.64 m d. 4.64 m

For items 11-12

Shawn who is 6 feet tall and is standing 18 feet away from a lamp post, casts a 9-foot shadow.

___11. How tall is the lamp post?

12 feet c. 16 feet

14 feet d. 18 feet

___12. When Shawn moves 4 feet farther from the lamp post, how long of shadow will he cast?

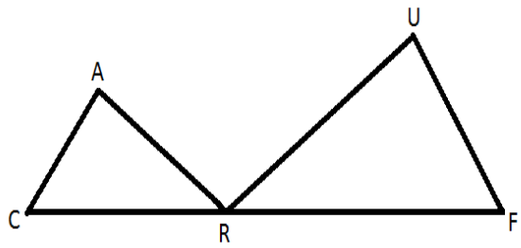
11 feet c. 16.5 feet

13.2 feet d. 22 feet

IV. PROBLEM SOLVING

Directions: Answer the following items.

A.

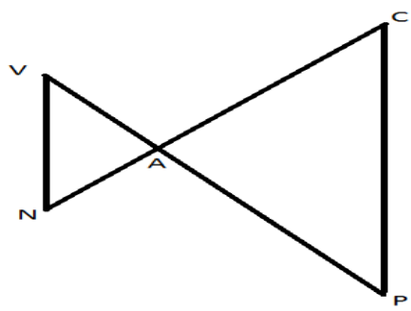


Given: $\frac{CA}{FU} = \frac{AR}{UR}$ and $\angle A \cong \angle U$

Prove: $\frac{AR}{UR} = \frac{CR}{FR}$

STATEMENTS	REASONS
1. $\frac{CA}{FU} = \frac{AR}{UR}$	1.
2.	2. Given
3. $\Delta CAR \sim \Delta FUR$	3.
4. $\frac{AR}{UR} = \frac{CR}{FR}$	4.

B.

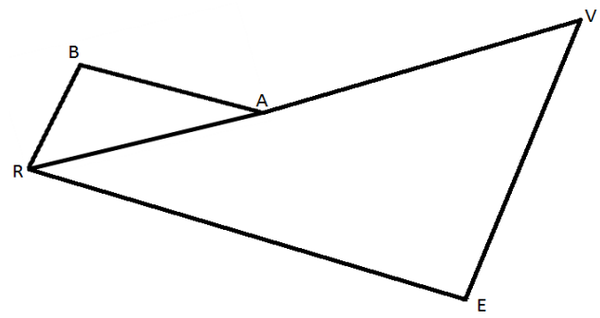


Given: $\angle N \cong \angle C$

Prove: $VA \cdot CA = PA \cdot NA$

STATEMENTS	REASONS
1. .$\angle N \cong \angle C$	1.
2.$\angle NAV \cong \angle CAP$	2.
3.	3. AA Theorem
4.$\frac{VA}{PA} = \frac{NA}{CA} = \frac{NV}{CP}$	4. Corresponding sides of similar triangles are proportional.
5. $VA \cdot CA = PA \cdot NA$	5.

C.



Given: $\frac{BA}{ER} = \frac{BR}{EV} = \frac{AR}{RV}$

Prove: $\overline{BR} \parallel \overline{EV}$

STATEMENTS	REASONS
1.	1. Given
2. $\Delta BAR \sim \Delta ERV$	2.
3. $\angle BRA \cong \angle EVR$	3.
4. $\overline{BR} \parallel \overline{EV}$	4.

ANSWER KEY

I. TRUE OR FALSE

11. F
12. F
13. T
14. T
15. F
16. F
17. F
18. T
19. F
20. F

II. IDENTIFICATION

1. a^{m+n}
2. Extremes
3. Variation
4. Side-Angle-Side (SAS) Theorem
5. Square/ Rhombus
6. Midpoint
7. Rhombus
8. Midline/ Median Theorem
9. Hypotenuse
10. Sum

III. MULTIPLE CHOICE TEST

1. C
2. C
3. C
4. C
5. B
6. C
7. A
8. D
9. B
10. B
11. D
12. A

IV. PROBLEM SOLVING

A.

1. Given
2. $\angle A \cong \angle U$
3. SAS Theorem
4. Corresponding sides of similar triangles are proportional

B.

1. Given
2. Vertical angles are congruent
3. $\Delta NAV \sim \Delta CAP$
4. $\frac{VA}{PA} = \frac{NA}{CA} = \frac{NV}{CP}$ or $\frac{VA}{PA} = \frac{NA}{CA}$
5. Fundamental Law of Proportion

C.

1. $\frac{BA}{ER} = \frac{BR}{EV} = \frac{AR}{RV}$
2. SSS Theorem
3. Corresponding angles of similar triangles are congruent
4. If two lines are cut by a transversal and the corresponding angles are congruent, then the lines are parallel.

DOMAIN 6 COMMUNITY LINKAGES AND PROFESSIONAL ENGAGEMENT

Strands:

1. Establishment of learning environments that are responsive to community contexts
2. Engagement of parents and the wider school community in the educative process
3. Professional ethics
4. School policies and procedures

REFLECTIONS

Learning is transformative so is the learning environment.

Establishment of learning environments that are responsive to community contexts helps the students grow holistically and become better persons & citizens of the country.

Good relationship with the parents is essential for the maximum development of the student.

I also realized that important announcement should properly be disseminated such as relaying them through office memorandum and emails to avoid any confusion.

EVIDENCES

ITLympics (November 22, 2017)


University Christmas Lighting Ceremony (December 5, 2017)




ITL Open House (December 7, 2017)




Team
Metamorphosis

VIII-ENNIS

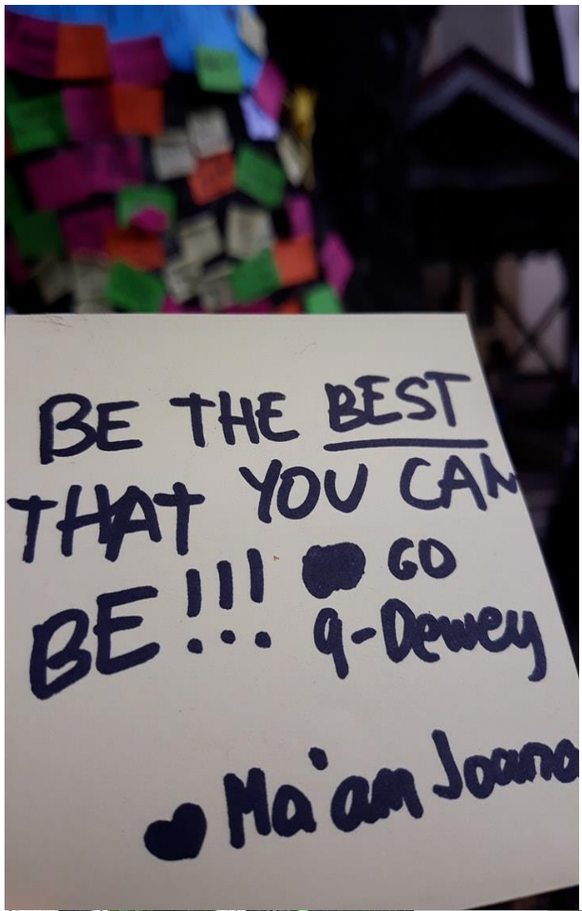


FIRE

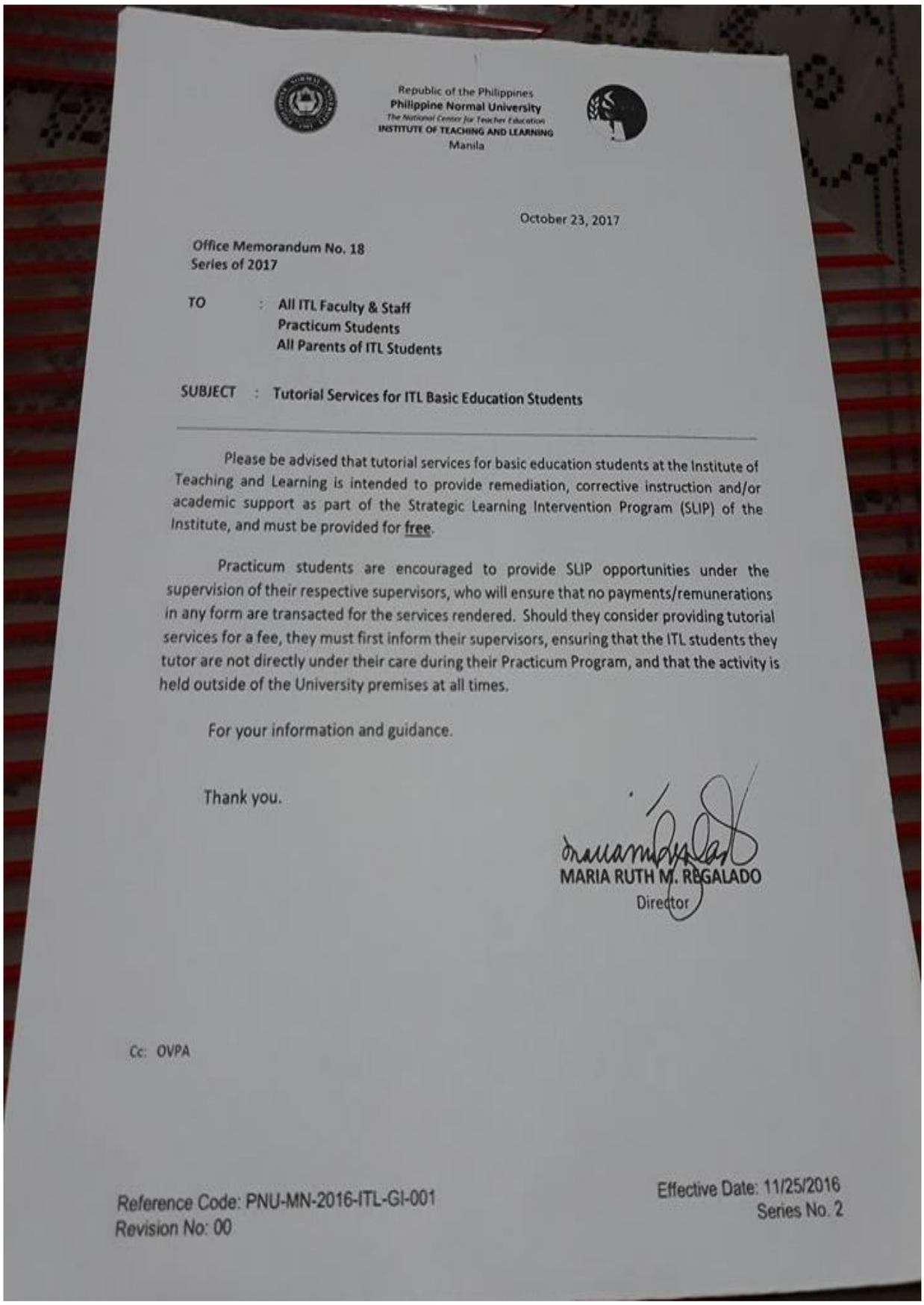


Exercise 3
Exercise 4

ITL Christmas Party (December 15, 2017)



Office Memoranda and Letter



Republic of the Philippines
Philippine Normal University
The National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING
Manila

October 23, 2017

Office Memorandum No. 18
Series of 2017

TO : **All ITL Faculty & Staff**
Practicum Students
All Parents of ITL Students

SUBJECT : **Tutorial Services for ITL Basic Education Students**

Please be advised that tutorial services for basic education students at the Institute of Teaching and Learning is intended to provide remediation, corrective instruction and/or academic support as part of the Strategic Learning Intervention Program (SLIP) of the Institute, and must be provided for **free**.

Practicum students are encouraged to provide SLIP opportunities under the supervision of their respective supervisors, who will ensure that no payments/remunerations in any form are transacted for the services rendered. Should they consider providing tutorial services for a fee, they must first inform their supervisors, ensuring that the ITL students they tutor are not directly under their care during their Practicum Program, and that the activity is held outside of the University premises at all times.

For your information and guidance.

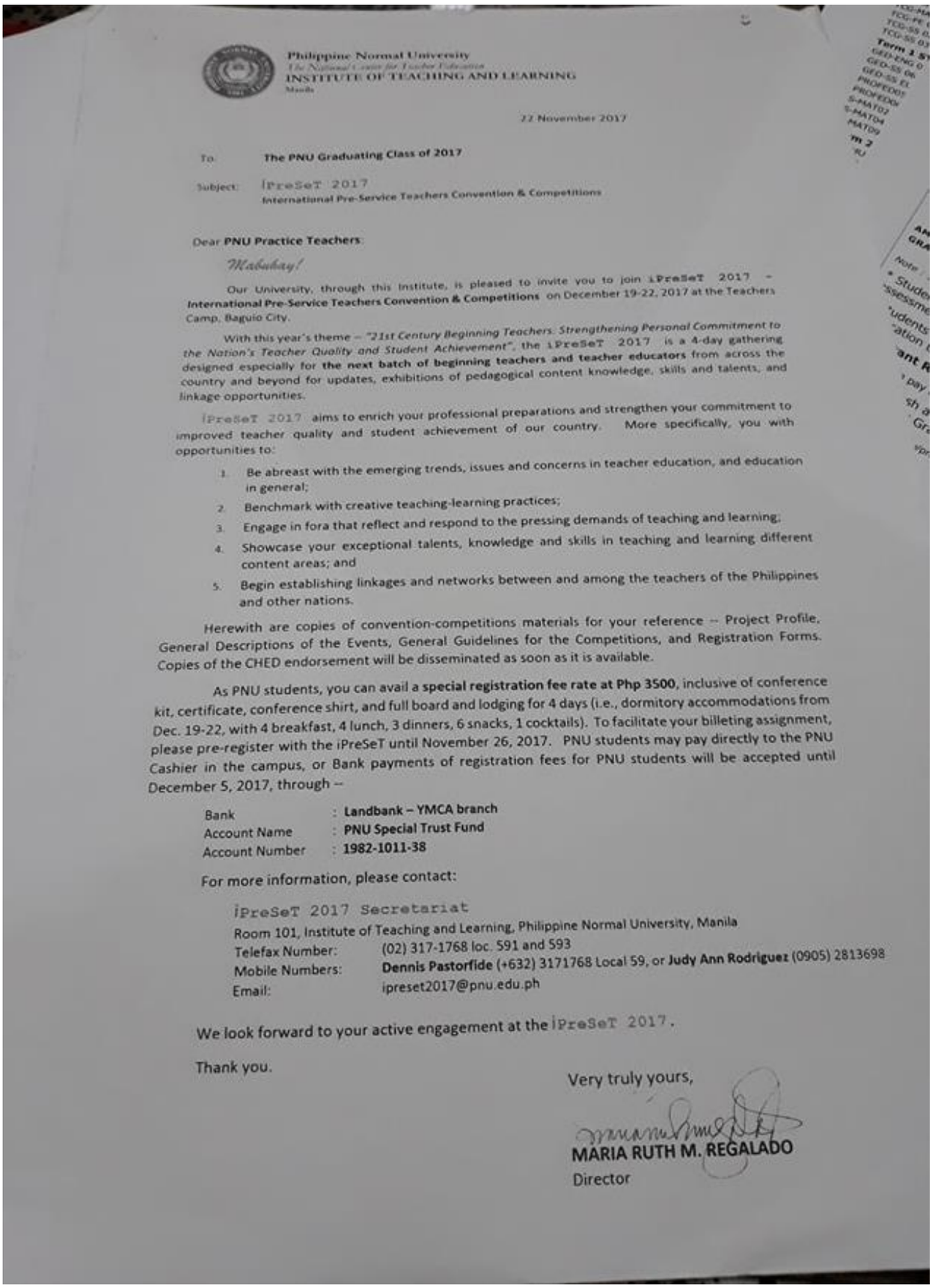
Thank you.

MARIA RUTH M. REGALADO
Director

Cc: OVPA

Reference Code: PNU-MN-2016-ITL-GI-001
Revision No: 00

Effective Date: 11/25/2016
Series No. 2



Philippine Normal University
The National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING
Manila

22 November 2017

To: **The PNU Graduating Class of 2017**

Subject: iPreSeT 2017
International Pre-Service Teachers Convention & Competitions

Dear **PNU Practice Teachers**:

Mabuhay!

Our University, through this Institute, is pleased to invite you to join iPreSeT 2017 – **International Pre-Service Teachers Convention & Competitions** on December 19-22, 2017 at the Teachers Camp, Baguio City.

With this year's theme – *"21st Century Beginning Teachers. Strengthening Personal Commitment to the Nation's Teacher Quality and Student Achievement"*, the iPreSeT 2017 is a 4-day gathering designed especially for **the next batch of beginning teachers and teacher educators** from across the country and beyond for updates, exhibitions of pedagogical content knowledge, skills and talents, and linkage opportunities.

iPreSeT 2017 aims to enrich your professional preparations and strengthen your commitment to improved teacher quality and student achievement of our country. More specifically, you with opportunities to:

1. Be abreast with the emerging trends, issues and concerns in teacher education, and education in general;
2. Benchmark with creative teaching-learning practices;
3. Engage in fora that reflect and respond to the pressing demands of teaching and learning;
4. Showcase your exceptional talents, knowledge and skills in teaching and learning different content areas; and
5. Begin establishing linkages and networks between and among the teachers of the Philippines and other nations.

Herewith are copies of convention-competitions materials for your reference -- Project Profile, General Descriptions of the Events, General Guidelines for the Competitions, and Registration Forms. Copies of the CHED endorsement will be disseminated as soon as it is available.

As PNU students, you can avail a **special registration fee rate at Php 3500**, inclusive of conference kit, certificate, conference shirt, and full board and lodging for 4 days (i.e., dormitory accommodations from Dec. 19-22, with 4 breakfast, 4 lunch, 3 dinners, 6 snacks, 1 cocktails). To facilitate your billeting assignment, please pre-register with the iPreSeT until November 26, 2017. PNU students may pay directly to the PNU Cashier in the campus, or Bank payments of registration fees for PNU students will be accepted until December 5, 2017, through --

Bank	: **Landbank – YMCA branch**
Account Name	: **PNU Special Trust Fund**
Account Number	: **1982-1011-38**

For more information, please contact:

iPreSeT 2017 Secretariat
Room 101, Institute of Teaching and Learning, Philippine Normal University, Manila
Telefax Number: (02) 317-1768 loc. 591 and 593
Mobile Numbers: **Dennis Pastorfide** (+632) 3171768 Local 59, or **Judy Ann Rodriguez** (0905) 2813698
Email: ipreset2017@pnu.edu.ph

We look forward to your active engagement at the iPreSeT 2017.

Thank you.

Very truly yours,

MARIA RUTH M. REGALADO
Director

Republic of the Philippines
Philippine Normal University
The National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING
Manila

December 7, 2017

Office Memorandum
No. 20
Series of 2017

TO : All iPreSet Participants

SUBJECT : Orientation/Briefing for iPreset 2017

Please come for an orientation for the iPreset preparations on **Monday, December 12, 2017** from **3:30 to 4:30PM** at the **Geronimo T. Pecson Main Auditorium**.

For your information and guidance.

Thank you.

MARIA RUTH M. REGALADO
Director

Reference Code: PNU-MN-2017-ITL-GI-001
Revision No: 00

Effective Date: 02/16/2017
Series No. 8

DOMAIN 7 PERSONAL GROWTH AND PROFESSIONAL DEVELOPMENT

Strands:

1. Philosophy of teaching
2. Dignity of teaching as a profession
3. Professional links with colleagues
4. Professional reflection and learning to improve practice
5. Professional development goals

REFLECTIONS

Growing teachers make growing learners and growing learners make growing teachers.

Happy teachers make happy learners and happy learners make happy teachers.

As a teacher, you have achieved a lot but there are greater things that you need to learn. Learn more from people in your growing professional network, be involved in the professional learning community and as you learn a lot, you are able to continuously reflect on yourself as an educator and as a person.

EVIDENCES

Republic of the Philippines
Philippine Normal University
The National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING
Manila

Practice Teaching Form 3

PT Competencies/Philosophy

A. Circle the items which you think you are already competent in. Indicate what you think is the level of your competence by checking the appropriate column, where **3** is the highest and **0** is the lowest.

Items	0	1	2	3
Personal Qualities: Shows awareness of				
1. Good grooming				☑
2. Having self-confidence				☑
3. Articulating one's ideas clearly in grammatically correct manner				☑
4. Having sense of humor			☑	
5. Cheerful performance of tasks				☑
Professional Orientation: Possesses knowledge of:				
1. Being responsible for one's behavior			☑	
2. Moral and legal responsibilities of PTs				☑
3. Accepting praise/suggestions/criticisms objectively				☑
4. Current trends/issues/concerns/practices in teaching				☑
5. The need for having pride in being a teacher				☑
6. Dealing well with students, peers, parents, CTs, school and community officials				☑
Observation skills				
1. Identifies objectives/teaching strategies				☑
2. Determines adequacy/appropriateness of teaching materials				☑
3. Describes teacher's skills and behavior that facilitates learning				☑
4. Describes pupils' behavior that help/disrupt				☑

learning				
5. Forms insights/conclusions about teacher's and learner's characteristics, classroom atmosphere, etc.				☑
Lesson Planning				
1. Translating broad educational goals into specific instructional objective				☑
2. Writing specific measurable objective				☑
3. Breaking down the components of the learning tasks into sequential order				☑
4. Designing relevant teaching experiences				☑
5. Developing teaching devices/aids				☑
6. Giving careful attention to cleanliness and orderliness, and the physical condition/arrangement in the classroom				☑
Instruction				
1. Teaches with minimum of lesson outline				☑
2. Sustains learner's interest thru varied voice projection and gestures and activities				☑
3. Provides adequate and accurate information about lesson				☑
4. Acknowledges/responds to learners' reaction/questions				☑
5. Demonstrates skills in using questioning techniques				☑
Management of Learner's Learning				
1. Motivates learners by:				
• Explaining lesson objectives				☑
• Conducting appropriate drills/review				☑
• Relating lessons to previous one				☑
• Utilizing varied devices/activities				☑
• Using well-modulated voice				☑
• Utilizing instructional materials that are organized, neat, attractive				☑
• Keeping records (all school forms and test results)				☑

• Establishing/maintaining reasonable rules of conduct in the classroom				☑
• Handling discipline with tact and good judgment				☑
• Observing time allotment				☑
• Giving clear appropriate directions/uses appropriate methods				☑
• Presenting lesson logically/systematically				☑
• Providing reinforcement activities				☑
• Leading learners to form generalizations				☑
• Correcting easy errors as observed				☑
Evaluating Learning Activities				
1. Constructs test congruent to lesson objective				☑
2. Keeps evaluation records				☑
3. Selects/administers/scores tests				☑

Submitted by: Joanabelle C. Zita

Year & Section: IV-18 BME

Date: September 28, 2017

Republic of the Philippines
Philippine Normal University
The National Center for Teacher Education
INSTITUTE OF TEACHING AND LEARNING
Manila

Practice Teaching Form 4

PT's Philosophy of Teaching

Consider how strongly you agree or disagree with the following statements, using this scale: 5 – strongly agree, 4 – agree, 3 – neutral, 2 – disagree, 1 – disagree strongly.

5 1. The most important role of a teacher is to be a model for intellectual and moral excellence in the classroom.

3 2. By studying humans in their natural settings, we can discover universal moral laws.

4 3. Although truth is changeable, we can discover it by using scientific method.
3 4. The main question teachers ask student is "What does this idea or content mean to you?
4 5. Although vocational studies have their place, most students should be required to have a strong liberal arts education.
5 6. The most important task for a teacher is to promote reasoning within a particular content area.
5 7. The role of the teacher is to engage students in active problem solving applied to social and personal problems.
2 8. Truth is subjective and based on personal experiences and beliefs.
4 9. There are enduring and unchanging truths and values in all subject areas that students need to understand.
5 10. To learn facts and truth in a content area, teachers may need to use considerable drill and practice.
5 11. Use of the scientific method is a major role of education.
4 12. The teacher's primary role is to enable students to create their own values.
4 13. Students learn best when they study the ideas and the works of great people.
5 14. There is enduring truth in all subject areas that students can discover by careful reasoning.
3 15. When deciding what curriculum should be emphasized for students, decision should be based on real-life usefulness of the content.
3 16. If forced to choose between covering the content and exploring personal perspective, a teacher should choose personal exploration.
3 17. Time-tested great literary works should be a required reading for all students even at the expense of more popular readings.
3 18. The curriculum should be based on the "basics" and rely on drill and memorization as learning strategies.
4 19. The most important role of the teacher is to facilitate reflection and use the scientific method to solve problems.
4 20. The most important concept to explore with students in the classroom evolves around love, freedom, responsibility and values.

Transfer your scores to this chart and add each column.

	A Idealism		B Realism		C Pragmatism		D Existentialism	
	1	**5**	2	**3**	3	**4**	4	**3**
	5	**4**	6	**5**	7	**5**	8	**2**
	9	**4**	10	**5**	11	**5**	12	**4**
	13	**4**	14	**5**	15	**3**	16	**3**
	17	**3**	18	**3**	19	**4**	20	**4**
TOTAL SCORE		**20**		**21**		**21**		**16**

How much did you agree or disagree with the educational philosophies discussed in this chapter? Each column represents one of the philosophies of learning: A = idealism, B = realism, C = pragmatism, D = existentialism. The more points you have in each column, the more your own philosophy matches with established philosophies. The highest possible score in any column is 25, and the lowest is 5. A score of 20 or above in any column indicates strong agreement, whereas a score of less than 10 indicates little agreement. Where are your highest scores, and where are your lowest? Is your own philosophy highly representative to the classical ways of thinking about education, or do you have a tendency to embrace more than one philosophical stance?

My highest scores are in Realism and Pragmatism which both have a score of 21. The lowest score is in Existentialism which has a score of 16. Based on this survey and my personal perception, I absolutely have the tendency to embrace more than one philosophical stance in education. Having the right combination of my philosophical stances with certain degrees will enable me to teach and learn more effectively.

Submitted by: Joanabelle C. Zita Date: September 28, 2017 Year & Section IV-18 BME

MATHTED's Biennial International Conference on Mathematics Education

October 19-21, 2017

De La Salle University-Dasmariñas, Cavite

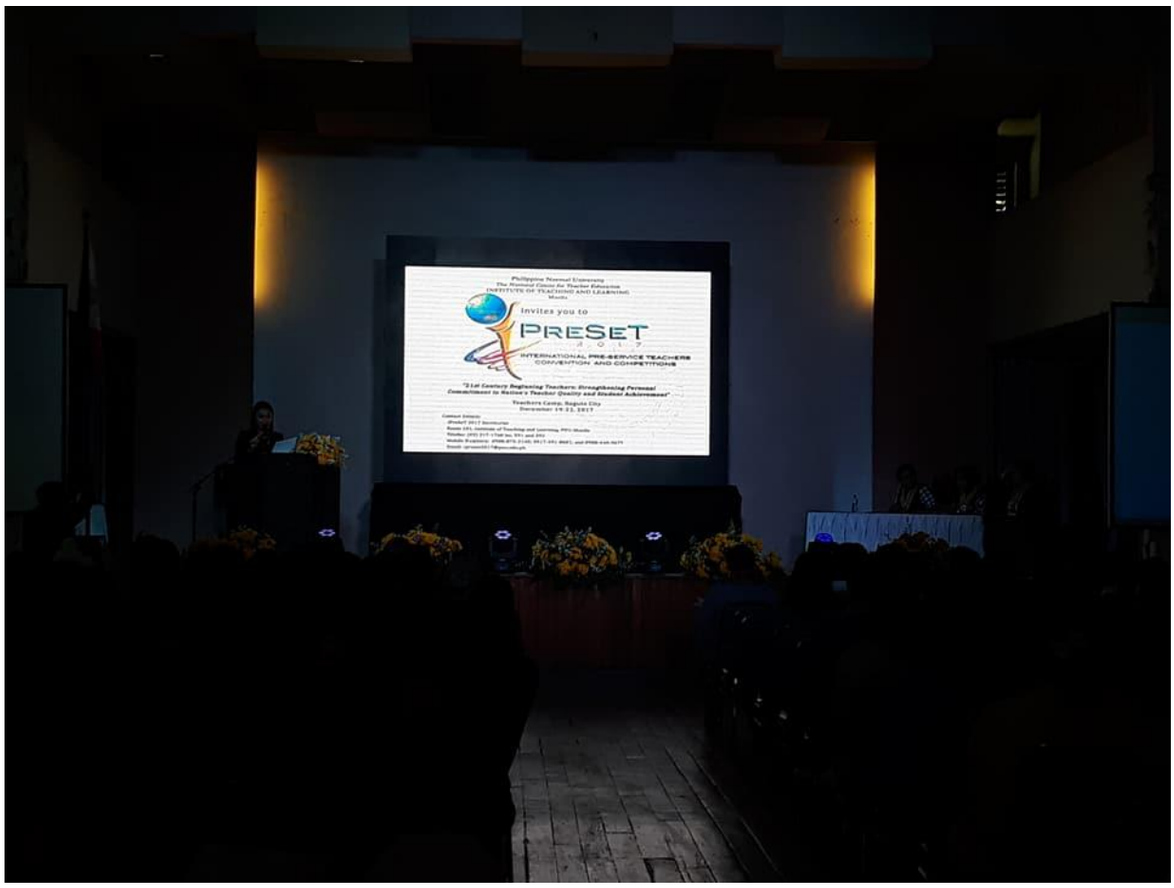
With my newly-found colleagues from University of La Salle, Bacolod

Poster presentation of our study with Han Russel Dalumpines, a co-researcher

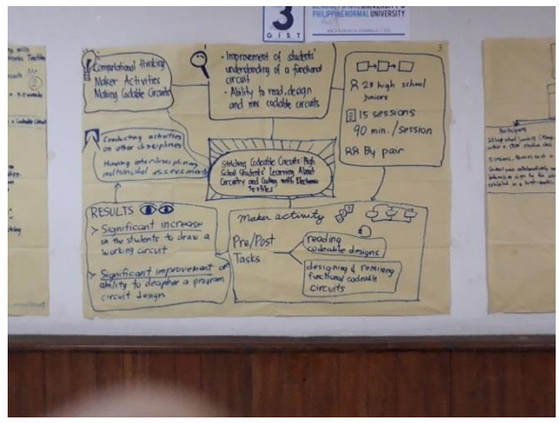
2nd DLSAU Annual Education Research Congress

November 25, 2017

De La Salle Araneta University, Malabon City

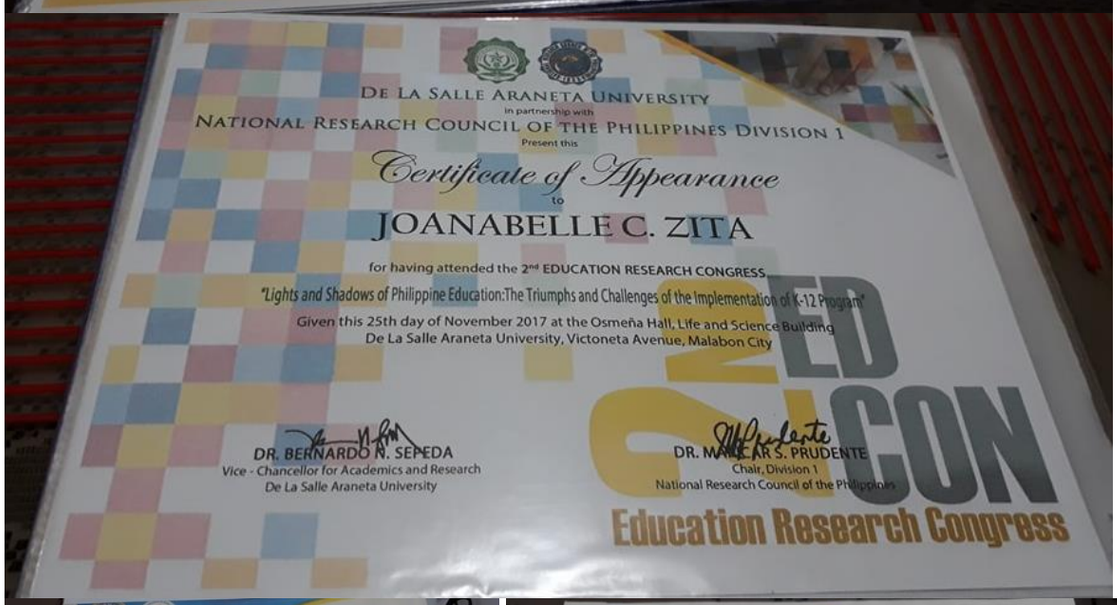


A photo opportunity with Dr. Yusuf Hilmi Adisenjaja of Universitas Pendidikan Indonesia after his plenary talk on Teaching and Learning Beyond Borders



Entry 3 of GIST Competition created by me and Ms. Jerica Dalmo of Benguet State University. This has won 2nd Place.

Certificates



Experiences in the IPreSeT 2017

1st day

We arrived at Teachers' Camp, Baguio around 5 am. We knew our accommodation and checked in. After that, we had our breakfast and in an hour, we proceeded to Benitez hall to start our convention. We listened to the keynote address of Hon. Princess Kiram-Hasan in which she talked about cultural sensitivity, peace & progress, gender sensitivity and others. We had our AM snacks and lunch. On the afternoon, Dr. Allan Reyes gave his plenary talk about Philippine Professional Standards for Teachers (PPST). After PM snacks, selected students showed their creativity and resourcefulness in making Indigenized Instructional Material. After that, I attended the meeting regarding the competition of Research Presenter which will be held on the next day. We had our dinner and then I attended Indi-G-Nite wearing my Balintawak dress. Dr. Yusuf Hilmi Adisenjaja of Universitas Pendidikan Indonesia had a photo opportunity with me to have a picture with a Filipina.

Reflection:

As teachers of either specialization, we must be aware and updated with the trends and challenges of education especially in the Filipino culture. PPST has established in order to cope with the trends and challenges of education in the Philippines and in the world. For us to be teachers of high quality, we must comply with the competencies indicated on the PPST. On photo opportunity, I realized that we must be proud in our culture since there are people especially in other countries really appreciated Filipino culture due to its richness and diversity.

2nd day

We had our Zumba as our morning exercise, ate our breakfast and listened to the second plenary which talks about PRC Updates on Board Licensure Examination for Teachers (BLEPT). Dr. Brenda Corpuz gave us some reminders on taking the BLEPT. While she was having her talk, the elimination for Research Presenter happened. Unfortunately, I wasn't chosen to be the representative for PNU. We had our third plenary talk which talks about Teaching and Learning beyond Borders. In this talk, Dr. Yusuf presented the education system in Indonesia and introduced the UPI campus. On the afternoon, we had our fourth plenary talk which talks about teachers' roles in gender and development of today's learners. Dr. Praksis Miranda talked about gender lens on education, societal advantages of gender fair education and emphasized the story of The Paper bag Princess. After that, I participated in the elimination for the iPreSeT Whiz. All the participants from PNU including me took a 26-item multiple choice type of exam. Unfortunately, I wasn't the representative for PNU. Then, three participants including the representative from PNU showed their brilliance for the competition proper. After that, there was a pilot testing session of the new event which is GIST competition. In this competition, each pair will be given a research article and you will make a graphic organizer. I voluntarily participated together with Jerica Dalmo of Benguet State University. We were given a 14-page research article and we're given an hour to make a graphic organizer. One hour was a pressure for us since more than half of the time was spent in reading the article. However, we managed to finish our work. We had our dinner together, exchanging our experiences as an education student and as a local in our places. On the evening, we listened to the teacher education researchers on the research forum.

Reflection

Some things that marked on my mind when taking the BLEPT is avoid erasures and avoid answering E on the choices since every question has an answer on the choices. Aside from that, I must not give up even though I wasn't chosen to be a representative for Research Presenter. There are people who are better than me and I must also learn from them to be a better research presenter.

Gender status greatly affects education and society. As a teacher, I must be sensitive enough and neutral. I must pursue gender fairness over gender equality. Based on the Paper bag Princess, I realized that you keep doing your role as a person and not doing your role based on your sex. As a female, if you can do what the males do, then, do it. During the GIST competition, I realized that it is more fulfilling to listen to the experiences and thoughts from the people with different background to expand your perspective as a future teacher and as a person.

3rd day

We had our circuit training as our morning exercise. After our breakfast, we had our fifth plenary talk which talks about gamification. Mr. Fred Lewis talked about the role of games in education, as well as its assessment to the students' values. After that, three research presenters showed their talent and creativity in presenting their study. On the afternoon, there was a microteaching festival wherein the competitors from different specializations showed their creativity and classroom management skills. On the evening, students showed their wit, philosophy in teaching and classroom management skills on the iPreSeT model. The closing program was also happened wherein the winners were awarded. I was glad that I and Jerica won 2nd place in the GIST competition.

Reflection

In utilizing and making games for learning, learn to balance fun, learning and value for the students to have optimal learning. In research presentation, go beyond the content, do your best for the audience to relate on your study. In the microteaching festival, there are myriad ways of presenting your lesson aside from board and chalk. Learn from them. In the iPreSeT model, in spite of tremendous schoolwork, be reminded of your philosophy and aims for teaching & learning and always be in your best appearance so that the students would appreciate your beauty and the things that they will learn from you.

4th day

This day was spent on roaming around in Baguio before we went home. I, together with my closest friends roamed around the Teachers' camp and Burnham Park. Though I didn't join on the city tour, I learned to be firm, responsible and self-reliant. I also learned to spare time for recreation in spite of huge amount of work. In the end, I am a human and I need rest and recreation. This is an opportunity for me to do them so I grabbed it. We had our lunch and I left at 12:30 in the afternoon.

CAREER TIMELINE

(MY PROFESSIONAL DEVELOPMENT GOALS)

Five years after graduation, I will…

- be a licensed professional teacher.
- be a Proficient Teacher.
- finish a Master's degree either in Mathematics or Mathematics Education.
- coach students who will compete in various math competitions and math Olympiads.

Ten years from now, I will…

- be a PhD holder.
- be a Highly Proficient Teacher.
- present my future researches in the fields of mathematics and mathematics education in various national and international conferences.
- teach in the tertiary level.

Fifteen years from now, I will…

- be a Distinguished Teacher.
- be a Professor and teach in a Graduate School.
- continue to conduct researches in mathematics and mathematics education.

For fifteen years and beyond, I will…

- continue to develop myself, update myself on the trends and challenges of education through attending various conferences, etc.
- pursue postdoctoral studies and graduate studies on other related fields.

IN RETROSPECTION

There are myriad of ways to teach, there are various strategies to teach effectively, there are approaches to manage a class and there are many methods for the students to be assessed whether how much they have learned from you. However, one must consider the learning environment and choose what the best practices among them are so that the students can achieve optimal learning. As your students learn from you, you should also learn from them. Make your students and the society your inspiration to continually learn!

MY PHILOSOPHY IN TEACHING

Happy teachers make happy learners and happy learners make happy teachers.

Growing teachers make growing learners and growing learners make growing teachers.

In my experience in teaching, I have learned a lot from my students, as well as from my supervising instructor, co-practice teachers, faculty and staff as well as from the professional learning community in education, from the conference, congress and convention that I had attended and the competitions I have participated. The students were glad to learn from us and we're glad to learn from them.

In Practice Teaching 1, I had two significant experiences that helped me develop this philosophy: (1) participation in a conference, a congress & a convention and (2) application of what I learned to my daily encounter with my students in the classroom. From the students' activities I have observed such as ITLypmics, ITL Open House & PNU Christmas celebration and my demonstration teaching, I have achieved and learned a lot but I realized that I still have many things to learn including the background of my current & future students and I have a lot of things that I need to improve in teaching. Having a growth mindset will also help my students to have their growth mindset to be the best people they can be and at the same time, I can be the best math educator that I can be!