

 GRADES 1 to 12 DAILY LESSON LOG	School:		Grade Level:	VI
	Teacher:	Credits to the Author	Learning Area:	MATHEMATICS
	Teaching Dates and Time:	JANUARY 23-27, 2023 (WEEK 10)	Quarter:	2ND QUARTER

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY																												
I. OBJECTIVES																																	
A. Content Standard	The learner demonstrate understanding of order of operations, ratio and proportion, percent, exponent, and integers																																
B. Performance Standard	The learner is able to apply knowledge of order of operations, ratio and proportion, percent, exponent, and integers in mathematical problems and real-life situations																																
C. Learning Competencies / Objectives	solves routine and non-routine problems involving addition of integers using appropriate strategies and tools.	solves routine and non-routine problems involving subtraction of integers using appropriate strategies and tools.	solves routine and non-routine problems involving multiplication and division of integers using appropriate strategies and tools.	2 ND QUARTERLY TEST	2 ND QUARTERLY TEST																												
II. CONTENT	Numbers and Number Sense	Numbers and Number Sense	Numbers and Number Sense																														
III. LEARNING RESOURCES																																	
A. References																																	
1. Teacher’s Guide pages																																	
2. Learner’s Materials pages																																	
3. Textbook pages																																	
4. Additional Materials from Learning Resource (LR) Portal																																	
B. Other Learning Resources	Mathletes 6 textbook, video clip, power point presentation	Mathletes 6 textbook, video clip, power point presentation	Mathletes 6 textbook, video clip, power point presentation	Test Paper	Test Paper																												
IV. PROCEDURES																																	
A. Reviewing previous lesson or presenting the new lesson	<p>Drill: Integers Word Clue! Write happy face if the word represents a positive integers and sad face if negative integer.</p> <p>Integers Word Clue Chart</p> <table><tr><th>+(Positive Integers)</th><th>-(Negative Integers)</th></tr><tr><td>earned</td><td>spent</td></tr><tr><td>saved</td><td>cost</td></tr><tr><td>deposit</td><td>withdrawal</td></tr><tr><td></td><td>writing a check</td></tr><tr><td>gained</td><td>lost</td></tr><tr><td>won</td><td></td></tr><tr><td>rose</td><td>fell</td></tr><tr><td>increase</td><td>decrease</td></tr><tr><td>up</td><td>down</td></tr><tr><td>ascended</td><td>descended</td></tr><tr><td>profit</td><td>loss</td></tr><tr><td>climbed</td><td>dove</td></tr><tr><td></td><td>under par</td></tr></table> <p>Review: Perform the indicated operation. (+10) + (-9) (-25) + (+5) (-80) + (+6)</p>	+(Positive Integers)	-(Negative Integers)	earned	spent	saved	cost	deposit	withdrawal		writing a check	gained	lost	won		rose	fell	increase	decrease	up	down	ascended	descended	profit	loss	climbed	dove		under par	<p>Drill: Write the opposite of each integer. +25 -57 -100 -82 75</p> <p>Review: Perform the indicated operation. (+20) - (-19) (-35) - (+5) (-60) - (-29) (-45) - (+30) (55) - (-26)</p>	<p>Drill: Perform multiplication on each pair of numbers. 12 & 4 7 & 3 15 & 9</p> <p>Write positive or negative: (+) ÷ (+) = (+) (+) ÷ (-) = (-) (-) ÷ (+) = (-) (-) ÷ (-) = (+) (+) x (+) = (+) (+) x (-) = (-)</p>	Giving directions	Giving directions
+(Positive Integers)	-(Negative Integers)																																
earned	spent																																
saved	cost																																
deposit	withdrawal																																
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	$(-120) + (+20)$ $(35) + (-20)$ Problem: Yesterday the temperature was 65 degrees and today it dropped by 8 degrees. What was the temperature today? Original File Submitted and Formatted by DepEd Club Member - visit depedclub.com for more		$(-) \times (+) = (-)$ $(-) \times (-) = (+)$ Perform division on each pair of numbers. 135 & 15 84 & 6 28 & 7 Review: Determine if the ff. pairs of integers have like signs or unlike signs. $(+7) \text{ \& } (-12)$ $(-4) \text{ \& } (-9)$ $(-5) \text{ \& } (-30)$ $(+2) \text{ \& } (-11)$ $(+56) \text{ \& } (-18)$		
B. Establishing a purpose for the lesson	A messenger forgot on what floor in a building he would deliver his package. With no one to ask for directions, he rode the elevator up to the 10 th floor. Then he went down 5 floors and went up again 4 floors. Still, he could not find the right floor. So he went up again 6 floors, then down again 3 floors and decided to stop for a while. On what floor did the messenger stop?	The temperature in Baguio City was 12° Celsius in the morning. It dropped to 8° Celsius in the evening. What is the difference between these temperatures?	After a community campaign on reducing waste, the amount of garbage in Rita's household decreased by 2 kg. per day. By how much will their garbage decrease after 6 days? What is the average reduced waste by each person in Rita's household if there are four of them in the family?		
C. Presenting Examples/Instances of new lesson	Use the 4-step plan to solve the problem. (See textbook on page 148-149)	To get the difference between the two temperatures, we need to subtract 8° from 12°. <ol style="list-style-type: none"> 1. What is asked? 2. What is the equation representing this situation? $(12) - (-8) = N$ 3. What is the difference between the temperature of Baguio in the morning and evening? 	Ask the ff. questions. 1. What integer will represent the decrease in garbage in a day? 2. If such decrease happens for 6 days, then what equation will describe the total decrease of garbage in 6 days? $(-2 \times 6 = n)$ -Multiplying integers is the same as multiplying whole numbers. The product of two integers with different signs is negative. On the other hand, the product of two integers with same sign is positive. Solution: Multiplying 2 and 6 is 12, but since the signs of the factors are different,	Paper & pencil test	Paper & pencil test

			<p>then the product is -12. Therefore, after 6 days, Ritas household will have a decrease of 12kg in their garbage.</p> <p>3.How are we going to know the average reduced waste of each member of Rita's household?</p> <p>-Dividing integers is the same as dividing whole numbers. The quotient of two integers with different signs is negative. On the other hand, the quotient of two integers with the same sign is positive.</p> <p>4. what will be the equation representing the average reduced waste of each member of Rita's household? What is the quotient of the two integers in your equation? $(-12 \div 4 = n)$</p> <p>Solution: $12 \div 4$ is 3. Since 12 & 4 have different signs, then the final answer will be -3. Thus, each of the 4 members of Rita's household reduced 3kg in their garbage.</p>		
D. Discussing new concepts and practicing new skills #1	Show video clip on how to solve word problem involving addition of integers.	Show video clip on how to solve word problem involving subtraction of integers.	<p>Discuss and explain the problem on page 170-171 of 21st Century Mathletes</p> <p>(present the problem using power point presentation)</p> <p>Show video clip on how to solve word problem involving subtraction of integers.</p>	Checking	checking
E. Discussing new concepts and practicing new skills #2	<p>Pair-share: Answer the problem by pair.</p> <p>A submarine hovers at 240 meters below sea level. If it descends 160 meters and then ascends 390 meters, what is its new position?</p> <p>Solution</p> <p>The starting elevation is 240 meters below sea level, or -240. Descending, or going down, by 160 meters means -160.</p>	<p>Pair-share: Answer the problem by pair.</p> <p>At sunrise, the outside temperature was 1° below zero. By lunch time, the temperature rose by 17° and then fell by 4° by night. What was the temperature at the end of the day?</p> <p>Solution</p> <p>The starting temperature is 1° below zero, or -1°.</p>	<p>Pair-share: Answer the problem by pair.</p> <p>Alicia owes Php200 to each of 4 friends. How much money does she owe?</p> <p>Solution: The problem above can be solved using <u>integers</u>.</p> <p>Owing Php200 can be represented by -200. Thus the problem becomes: $(-200) (^4)$</p> <p>The parentheses indicate that these integers are being multiplied. In order</p>	Recording	Recording

	<p>Ascending, or going up, by 390 meters means 390.</p> <p>Equation: $-240 + (-160) + 390 = -10m$</p>	<p>Later, the temperature rose, or went up, by 17°. Then, the temperature fell, or went down, by 4°.</p> <p>Equation: $-1^{\circ} + 17^{\circ} - 4^{\circ} = 12^{\circ}$</p>	<p>to solve this problem, we need to know the rules for multiplication of integers.</p> <p>Rule 1: The product of a positive integer and a negative integer is a negative integer.</p> <p>Rule 2: The product of two negative integers or two positive integers is a positive integer.</p> <p>We can now use Rule 1 to solve the problem above arithmetically: $(-200)(+4) = -800$. So Alicia owes -Php800.</p>		
F. Developing mastery (Leads to Formative Assessment)	<p>Group Activity: Use the 4-step plan to solve the problem</p> <p>1. In the first half of a trivia game, Kenneth scored 500 points. Then, during the second half, he lost 200 points. What was his total score? Solution: $500 + (-200) = 300$</p> <p>2. Simon spent Php1,000 on a fancy watch and deposited a Php3,000 paycheck. How much is the change that Simon had? Solution: $-1,000 + 3,000 = 2,000$ Simon had Php2,000 more</p>	<p>Group Activity: Use the 4-step plan to solve the problem</p> <p>1. The highest point in Asia is Mount Everest at 8850 meters. The shore of the Dead Sea, the lowest point in Asia, is about 410 meters below sea level. What is the difference between these elevations? Solution: Use integers to represent the two elevations. Mount Everest: 8850 m Dead Sea: 410 m Find the difference of 8850 and 410 meters. $8850 - (-410)$ $= 8850 + 410$ Rule for subtracting integers $= 9260$ ANSWER: The difference between the elevations is 9260 meters. Subtraction can be used to find a change in a variable such as temperature or elevation. To find the change, subtract the old or start value of the variable from the new or end value of the variable.</p>	<p>Group Activity: Answer the ff. problems. Use the 4-step plan to solve the problem</p> <p>1. A person has a debt of Php500. Five friends offer to pay off all of the debt. How much does each person need to pay in order to pay off the debt?</p> <p>2. Ms. Reyes needed Php250 a show. She withdrew five times that amount. How much money did she withdraw?</p> <p>3. A sprinkler was -20 feet below ground level. Mr. Cruz has a machine that digs -4 feet at a time. How many digs does he need to make in order to reach the sprinkler?</p> <p>Answers: 1. -Php100 2. -Php1,250 3. 5 digs</p>	Finding the MPS	Finding the MPS

		<p>2. In Fairfield, Montana, on December 24, 1924, the air temperature dropped a record amount. At noon, the temperature was 63°F. Twelve hours later, the temperature was 21°F. What was the change in temperature?</p> <p>Solution: Change in temperature = end temperature - start temperature = -21 - 63 Substitute values. = -21 = (-63) Rule for subtracting integers = 84</p> <p>ANSWER: The change in temperature was -84°F, so the temperature dropped 84°F.</p>			
G. Finding practical applications of concepts and skills in daily living	<p>Use the 4-step plan to solve the problem</p> <p>1.On the first play, the football team lost 6 yards. On the second play, the team lost 5 yards. What was their total change in yards?</p> <p>2.A submarine was situated 800 feet below sea level. If it ascends 250 feet, what is its new position?</p>	<p>Use the 4-step plan to solve the problem</p> <p>In the Sahara Desert one day it was 136oF. In the Gobi Desert a temperature of -50oF was recorded. What is the difference between these two temperatures?</p> <p>2.Mt. Everest, the highest elevation in Asia, is 29,028 feet above sea level. The Dead Sea, the lowest elevation, is 1,312 feet below sea level. What is the difference between these two elevations?</p>	<p>Solve this problem! Use the 4-step plan to solve the problem</p> <p>1.Four roommates share an apartment. The balance for their bills for the month of July is -Php1600. How much do they each owe?</p> <p>2.Yesterday's low temperature was -2.5. Today's low temperature is 5 times as low as yesterday's low temperature</p>	Assessing the result of the test by finding the Least Mastered Skills/MPS	Assessing the result of the test by finding the Least Mastered Skills/MPS
H. Making generalizations and abstractions about the lesson	How do you solve routine and non-routine problems involving addition of integers using appropriate strategies and tools?	How do you solve routine and non-routine problems involving subtraction of integers using appropriate strategies and tools?	How do you solve routine and non-routine problems involving multiplication & division of integers using appropriate strategies and tools?	Think of the interventions you can give for the LMS	Think of the interventions you can give for the LMS

I. Evaluating Learning	Solve each problem: 1.Rio walked 5 steps forward, 8 steps backward, 9 steps forward and 3 steps backward. How many steps is Rio from where he started? (Continuation on page 151 of txbk/ see power point presentation)	Solve each problem: 1.RJ was able to save Php895 from his weekly allowance. If he wants to buy a second hand mobile phone for Php1,050, how much more money does he still need? (Continuation on page 164 of txbk/ see power point presentation)	Solve each problem: 1.Mr. Cruz went to market to buy some fruits and vegetables. He bought 5 apples at Php30 each and 3 cabbages at Php10 each. He gave the vendor a 500-peso bill. How much change did he get? (Continuation on page of 172 of txbk/ see power point presentation)	Giving interventions for those who did not reach the mastery level	Giving interventions for those who did not reach the mastery level
J. Additional activities for application and remediation	For additional activity, answer Math Challenge on page 151	If the temperature was -7 degrees (Fahrenheit) at 6 AM, rose 4 degrees by 7 AM and then rose another 8 degrees by 8 AM, what was the temperature at 8 AM?	For additional activity, answer Math Challenge on page 173.		
V. Remarks					
VI. REFLECTIONS					
A. No. of learners who earned 80% on the formative assessment					
B. No. of learners who require additional activities for remediation who scored below 80%					
C. Did the remedial lessons work? No. of learners who have caught up with the lesson					
D. No. of learners who continue to require remediation					
E. Which of my teaching strategies worked well? Why did this work?					
F. What difficulties did I encountered which my principal or supervisor can help me solve?					

G. What innovation or localized materials did I use/discover which I wish to share with other teachers?					