DAILY LESSON PLAN

School	EUSEBIO HIGH SCHOOL	Grade Level	7
Teacher	Romel Junio	Learning Area	TLE 7
Date		Quarter	Second

I. OBJECTIVES		
1. Content Standards	Demonstrate proficiency in performing addition, subtraction, multiplication, and division with whole numbers, decimals, and fractions.	
2. Performance Standards	Able to accurately perform addition, subtraction, multiplication, and division operations on whole numbers, decimals, and fractions.	
3. Learning Competencies	Code: TLE_CSS9-Q2-M.pdf At the end of the lesson, the learners should be able to: 3.1 Demonstrate understanding by explaining the purpose and significance of each fundamental operation (addition, subtraction, multiplication, and division) in mathematical problem-solving. 3.2 Develop an appreciation for the role of mathematical operations in real-world applications by expressing their opinions on how these operations contribute to problem-solving in daily life situations. 3.3 Apply the four fundamental operations using a computer software or calculator, demonstrating accurate and efficient computational skills in solving mathematical problems.	
I. CONTENT	Four Fundamental Operation of Mathematics	
II. LEARNING RESOURCES		
A. References		
1. TG pages		
2. LM pages	SLM 6: Four Fundamental Operation of Mathematics pp. 7- 11	
3. Textbook pages		
4. Additional materials from		

Learning Resource (LR) portal	
B. Other Learning Resources	Digital Learning Resources: PowerPoint presentation, laptop, HDMI. Traditional Learnings Resources: pictures, chalk, and TV.

III.	**PROCEDURES**
A. Reviewing previous lesson or presenting the new lesson	Teacher: give at least 5 safe handling procedures in measuring instruments. Student answer: Teacher: How do you store properly the measuring instruments? Student answer:
1. Establishing a purpose for the lesson	Teacher will give an activity related on the incoming topic Teacher: add the following binary numbers. Choose your answer inside the box. Write the letter and the binary digits a. 1001 b. 1000010 c. 10101010 d. 11100001 e. 100110011 1. 101+100= 2. 100001+100001= 3. 1011100+1001110= 4. 111000+10101001= 5. 10101001+10001010= Answer: a. 1001 b. 1000010 c. 10101010 d. 11100001 e. 100110011
a. Presenting examples/ instances of the new lesson	Teacher Examples Presented in Class: Addition: Example: "Imagine you're managing an inventory system for a computer service center. You currently have 3 computer units in stock, and you receive 4 more. How many computer units do you have in total?" Operation: (3 + 4 = 7) Subtraction: Example: "In your computer servicing workshop, you have 8 laptops available, and you send 3 of them for repair. How many laptops do you have remaining in the workshop?" Operation: (8 - 3 = 5)

		Multiplication: Example: "You are responsible for ordering parts, and you need to calculate the total number of RAM sticks. If you order 5 sets, and each set contains 12 RAM sticks, how many RAM sticks will you have in total?" Operation:(5 times 12 = 60) Division: Example: "In your computer training program, you have 30 USB drives, and you want to distribute them equally among 6 students. How many USB drives will each student receive?" Operation: (30 div 6 = 5)
1.	Discussing new concepts and practicing new skills #1	Certainly! Here's a teacher and student conversation based on the provided context: Teacher: Alright class, today we're diving into the fascinating world of binary arithmetic and the four fundamental operations: addition, subtraction, multiplication, and division. Now, in computers, everything is represented using binary numbers - that's just 0s and 1s. Each of these digits is called a 'bit', short for binary digit. So, just like a light bulb can be either on (1) or off (0), computers interpret all data, whether it's text, numbers, images, or even videos, using these bits. Student: So, like, everything in computers is just made up of zeros and ones? Teacher: Exactly! Now, let's start with addition. When adding binary numbers, we follow a few simple steps. We add each pair of bits, just like we do with decimal numbers. If the sum is 2, we write down a 0 and carry the 1. It's important to remember that in binary, 1 + 1 = 0 with a carry of 1. We continue this process until we've added all the bits. Student: So, it's like regular addition but with only two possible numbers. Teacher: Precisely! Now, moving on to subtraction. Binary subtraction is just like decimal subtraction. We align the numbers and subtract each pair of bits. If the top number is smaller than the bottom one, we borrow from the next bit. Student: Okay, subtraction seems straightforward. Teacher: Good! Now, let's talk about multiplication. Binary multiplication is similar to decimal multiplication, but simpler because we're only working with 0s and 1s. We multiply each bit of one number with all the bits of the other. There's no carrying or borrowing involved. Student: That sounds easier than regular multiplication.

	Teacher: It can be, indeed. Finally, division. Binary division follows the same principles as decimal division. We divide and get a quotient, then multiply the divisor by the quotient and subtract it from the dividend. We repeat this process until we have a remainder of 0. Student: Division always confuses me a bit, but I think I'm getting the hang of it. Teacher: Remember, practice makes perfect with these operations, especially in binary. So, don't be afraid to tackle some exercises and get comfortable with these concepts. It's a fundamental part of understanding how computers process information. Keep up the good work!
1. Developing mastery (Leads to Formative Assessment 3)	Teacher: compute the problem showed in the power point presentation answer it on your notebook 1. 0 x 1 = 2. 1 + 0 = 3. 1- 0 = 4. 1 x 1 = 5. 0 – 0 = 6. 0 x 0 = 7. 1 + 1 = 8. 1 – 1 = 9. 1 x 0 = 10.0 – 1 = Answer: 1. 0 2. 1 3. 1 4. 1 5. 0 6. 0 7. 0 8. 0 9. 0 10. 0 carry 1
2. Developing Mastery	Teacher: Solve each of the following problems using four fundamental operations. Write the answer with solution in 1whole sheet of paper. 1.) 1001+1010= 2.) 10101011-10101000= 3.) 100011x101011= 4.) 1011÷10101= 5.) 1000÷100= Answer: 1. 10011

		2. 11
		3. 10111100001
		4. 1011
		5. 10
3.	Finding practical applications of concepts and skills in daily living	Teacher: Crosswise, write down what you have learned today about binary.
4.	Making generalizations and abstractions about the lesson	Student: Hi, sir, we've been learning about the four fundamental operations of mathematics—addition, subtraction, multiplication, and division. It feels like a lot to take in. Teacher: I'm here to help. Yes, these operations might seem like a handful, but they're the building blocks of math. Each one plays a crucial role in solving all sorts of problems. Student: Yeah, I get that, but sometimes I mix up the rules for each operation. Teacher: Totally normal! Let's break it down. Addition is like combining things, right? You just put numbers together. And subtraction, well, that's like taking things away. What's tricky? Student: I guess multiplication is alright. It's like adding a number repeatedly, I think. But when it comes to division, I get a bit confused with all the steps. Teacher: No problem. Multiplication is indeed repetitive addition. Now, for division, think of it as sharing or grouping. You divide a total into equal parts. Remember, each operation has its own set of rules, but the key is practice and understanding those rules. Student: True. So, why are these operations so important? Like, why do we need to know them so well? Teacher: Great question! These operations are the foundation of math. They're like tools in a toolbox. You use addition when you need to find a total, subtraction when you need to figure out the difference, multiplication when you have repeated groups, and division when you want to share or distribute something. Knowing these operations well helps you solve a wide range of problems in various situations. Student: Ah, got it. It's like they're the basics for tackling any math problem.

	Teacher: Exactly! Whether you're dealing with numbers in a science experiment, calculating costs in a business, or figuring out how long a journey will take, these operations are there to help you navigate through it all. Understanding the rules and properties of each operation is like having a roadmap for your math journey.
	Student: Thanks, sir. I think it's making more sense now.
	Teacher: You're welcome! If you ever feel stuck, just remember, practice is key. Keep at it, and you'll become a pro at using these fundamental operations to solve all sorts of mathematical puzzles.
5. Evaluating Learning	Teacher: In your notebook, write about how your knowledge of the four fundamental operations in mathematics will benefit your studies.
6. Additional activities for application or remediation	Assignment: Teacher: Write on your notebook What is Geometry

IV. REMARKS	

V. REFLECTION	
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 encounter which my principal or superior can help me solve?	
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?	

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