**Regular Unit 1 Study Guide**

1. Ethan bought a printer on sale for $59.99 and a jump drive for $6.99. The sales tax on the total was $5.36. Ethan gave the sales person four $20 bills. How much change did Ethan receive?
2. Seven people spent a total of $151.55 on lunch. If they shared the cost equally, how much did each person pay?
3. John cut a 4 ft long piece of lumber into shorter pieces to repair his deck. He cut three pieces each 3/4 ft long, and two pieces each 1/2 ft long. How much wood did he have left?
4. Brian has a chunk of cheese that weighs 5 lb. He wants to divide the chunk into smaller pieces that weigh 1/4 lb each. How many smaller pieces will he have?



1. Mr. Allen has $149 in his checking account. He wants to write a check for $169 to pay a bill. Is this a good idea? Why or why not? Use addition of integers in your explanation.
2. A scuba diver descended to an elevation of 250 feet, examined some coral, and then ascended 14 feet to observe a school of clownfish. At what elevation was the school of clownfish?
3. Write the expression $-6-(-7)$ as an addition problem.
4. Simplify: 5(8-25)
5. An airplane descends at a rate of 450 feet per minute. Write and evaluate an expression to show how far the plane will descend in 7 minutes.
6. Which two integers have a difference of 24 and a quotient of 27?
7. Which statement is true?
	* 1. A rational number is always an integer
		2. an integer is always a whole number
		3. a rational number is always a whole number
		4. an integer is always a rational number
8. Alex had $573.49 in his checking account. He wrote checks for $65.90 and $258.25. He then deposited $135 into his account. Write an expression to find the amount that remained in Alex’s account?
9. The deck from which a diver descended was 23 1/2 feet above sea level. A diver descended 38 3/4 feet from the deck into the sea. What depth did the diver reach?
10. A submersible at the Oceanographic Institution dove to a depth of 3,810 meters below sea level. It then dove an additional 690 meters. How many meters below sea level was the submersible after the second dive?
11. At noon, the temperature on Mt. Washington in Maine was 0°C. The temperature dropped an average of -0.5°C an hour. At what time would the temperature be -2.6°C?