6.3 More Modeling Equations

CA #1

Name:_____

Directions: Circle the equation that best fits the given situation. Then SOLVE the equation.

1) Subtracting 1 from twice the sum of -17 and 8 times a number is -99. What's the number?

a. $2(-17) + 8n - 1 = -99$ c. $2(n + 8 - 1) = -99$

b. $2(-17 + 8n) - 1 = -99$ d. $1 - 2(-17 + 8n) = -99$

Solution:

2) ElectroMarket sells a TV after adding $\frac{1}{8}$ of the price it costs them to purchase it. If the final price is $252, how much did ElectroMarket purchase the TV for?

a. $t - \frac{1}{8}t = 252$ c. $t + \frac{1}{8} = 252$

b. $t + \frac{1}{8}t = 252$ d. $\frac{1}{8}t - t = 252$

Solution:

3) Twice the sum of a number and nine, subtracted from 12 is 0. What's the number?

a. $12 - 2(9 + n) = 0$ c. $(2n + 9) - 12 = 0$

b. $2(9 + n) - 12 = 0$ d. $12 - (2n + 9) = 0$

Solution:

4) Zippy-Car sells a car $\frac{1}{6}$ off of its regular price. The cost of the car after the discount is $20,000. How much is the car normally?

a. $c + \frac{1}{6}c = 20000$ c. $c - \frac{1}{6} = 20000$

b. $1 - \frac{1}{6}c = 20000$ d. $c - \frac{1}{6}c = 20000$

Solution:

Directions: For each situation make an equation, define your variables and solve your equation.

5) The sum of three consecutive integers is -138. Find the three integers.

Equation: **Answer:**

6) Mr. Sullivan sells cookies he makes from home. He sells them for what they cost to make, plus two thirds of that cost. If a cookie costs $1.50, how much does it cost Sully to make it?

Equation: **Answer:**

7) The length of a rectangle is 5 cm more than the width. Find the length of each side of the rectangle if the perimeter is 94 cm.

Equation: **Answer:**