

Name: _____

Hour: _____

Score: _____/46

*Directions: Solve each equation. **Show all work** for full credit.*

1.1 Solving One-Step Equations (1 pt each)

1. $x + 7 = -3$

$x = \underline{\hspace{2cm}}$

2. $\frac{y}{8} = 5$

$y = \underline{\hspace{2cm}}$

1.2 Solving Two-Step Equations (2 pts each)

3. $-2x - 3 = -4$

$x = \underline{\hspace{2cm}}$

4. $\frac{x}{5} - 10 = 5$

$x = \underline{\hspace{2cm}}$

1.2 Combining Like Terms (3 pts each)

5. $2w + 7w - 28 = 26$

$w = \underline{\hspace{2cm}}$

6. $5x + 7 - 3x - 1 = -16$

$x = \underline{\hspace{2cm}}$

1.4 Rearrange formulas to highlight a quantity of interest

Solve each equation for the variable specified. (2 pts each)

15. $y = 5x - 2$ Solve for x	16. $A = \frac{1}{2}bh$ Solve for h
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*Directions: Solve each problem and choose the best answer.
Write the letter of your answer on the line. (2 pts each)*

17. Solve $-8x - x + 5 = -6x + 5 - 3x$. _____

- A. $x = 0$
- B. $x = 5$
- C. Infinitely Many Solutions
- D. No Solution

18. What value of x makes the equation below true? _____

$$5x + 9 = x + 20$$

- A. 7.25
- B. 5.8
- C. 2.75
- D. 2.2

19. The formula $PV = 300R$ is used in chemistry. How can this formula be solved for P ?

- A. Divide both sides of the formula by P .
- B. Divide both sides of the formula by V .
- C. Subtract P from both sides of the formula.
- D. Subtract V from both sides of the formula.

20. In 10 years, Maria will be 39 years old. Let m represent Maria's age today. Which equation can be used to find m ?

- A. $m = 39 + 10$
- B. $m - 10 = 39$
- C. $m + 10 = 39$
- D. $10m = 39$

The following instructions refer to the algebraic expression below. (1 pt each)

$$2x + 4x + 10$$

20. Circle the **coefficient(s)**.
21. Put a triangle around the **constant(s)**.
22. Put a box around the **math operation(s)**.
23. How many **terms** are in the expression? _____