Name: _____

Date:_____ Hour:_____

| EXPRESSIONS & EQUATIONS | Problem Numbers | Points Earned | Points Possible | Percent Correct | Achieved Scale Score |
|---|---|---|---|---|---|
| I can simplify an algebraic expression. | 1-10 | | 10 | | ☐  3 |
| I can solve linear equations in one variable. | 11-24 | | 18 | | ☐  3 |
| I can solve real-world problems involving solving linear equations. | 23-25 | | 3 | | ☐  3 |

Identify the terms and like terms in the expression. (1 point each)

1. $7x + 3 - 4x + 9$

    Terms:_____

    Like Terms:_____

2. $10x + 4y + 3x - 15y$

    Terms:_____

    Like Terms:_____

Find the sum or difference. (1 point each)

3. $(4x + 3) - (x - 2)$

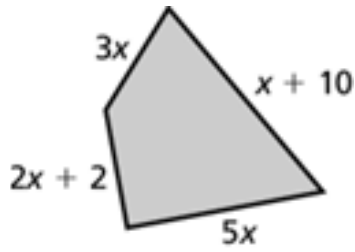5. $(-2x + 1) + 2(3x - 4)$

4. $(3x - 7) + (5x - 6)$

6. $(5x - 9) - 3(8 - 2x)$

Factor out the coefficient of the variable. (coefficient- the number in front of variable) (1 point each)

7. $9x - 36$

8. $5x + 15$

9. Write an expression in simplest form that represents the perimeter (distance around) of the polygon. (1 point)



10. One page of a petition can hold $p$ signitures. You were able to get $4p + 5$ people to sign the petition. Your friend was able to get $2p - 3$ people to sing the petition. Write an expression that represents the number of people that you are your friend got to sign the petition. (1 point)

Solve the equation. Check your solution. (1 point each)
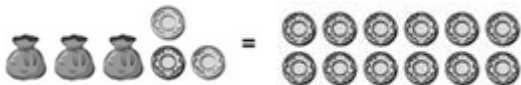
11. $x - 6 = 21$

12. $6x = 48$

13. $x + 8 = -12$

14. $-0.5x = -4.3$

Solve the mystery pouch problem below. Show or explain your thinking. (1 point)

15.



16.

Solve the equation.  Check your solution.  (1.5 points each)

17.  $2x - 3x = 5$

18.  $-8.3 = 2x + 5.7$

19.  $-7 = \frac{x}{2} + 1$

20.  $-2.9 = 3x + 4.3$

21.  $11 + 3x = -25$

22.  $2(x + 1) = -2$

23.  $-2x + 6 = -8$

24.  $9x - 12 = -20$

Write an equation. Then solve.  (1 point each)

25.  The temperature is $-4°F$.  A high pressure front increases the temperature to $8°F$.  By how many degrees did the temperature increase?

26.  A pack of daisy flower seeds costs $4, and a pack of sunflower seeds costs $2.50.  You buy the same number of packs of each type of flower and spend $39.  How many packs of each do you buy?

27. An egg carton holds 12 eggs.  A breakfast buffet uses 96 eggs by 8:00 A.M.  Whe n the buffet ends at 10:30 A.M., a total of 156 eggs were used.  How many eggs were used after 8:00 A.M.?