Name _____

Period _____

Expressions and Equations Review

Write as expressions:

1.   one fourth the total of y and 18   _____

2.   -16 less than k is 4   _____

3.   3 times the sum of -4 and m is 10   _____

4.   21 decreased by twice a number p _____

Simplify each expression:

5. $-2(v^2 - 3v) - 7v$ 6. $6p + 10g - 12g + 6g - 7p$

_____   _____

7. $9 - 3(x + 4)$ 8. $5(3x - 2) - 6(x - 3)$

_____   _____

Solve each equation. Show all steps.

9. $19 = 5w + 13 - 7w$ 10. $25 = -5(t + 9)$

_____   _____

11. $50 + 3y - 10 + 3y = 64$ 12. $42 = \dfrac{3m}{4} + 9$

_____   _____

13.   Three dollars more than   14. $-27 = -3(c + 11)$
four times the price is $51.

_____   _____

15.   4n = 4n − 28 + 2n   16.   -43 − 3t = 7t + 37

_____   _____

Define the variable. Write and solve an algebraic equation for the following situations:

17.   Five family members and you went to Great America. You did not have season passes, but you did have a coupon that takes $25 off the total price. You also bought a family food pass for $108. You end up paying a total of $230. How much was each Great America ticket that day?

18.   Candy-grams were being sold at lunchtime. On Monday, Jerome bought four candy-grams. On Tuesday he bought nine more. He spent a total of $16.25. How much was each candy-gram?

19.   Given the diagram of the pentagonal room. Two sides are missing their lengths. The total perimeter of the room is 60.25 feet. How long is each missing side length?

x

x

10.25 ft

10.25 ft

14.75 ft.