

Name: \_\_\_\_\_

Class: \_\_\_\_\_

### Equations Test Review Sheet

1. Find the value of  $a$  that makes the equation true:

$$4(a + 11) = 12$$

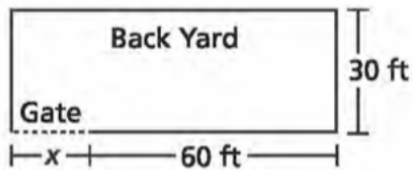
2. The amount of money in a bank account increased by 15.5% over the last year. If the amount of money at the beginning of the year is represented by  $x$ , create an expression for the amount of money in the bank account after the increase.
3. What is the result if  $0.25x - 1.5$  is subtracted from  $4.6x + 12$ ?
4. Sana spent \$500 at a store. She bought 2 bags for \$45 each and spent the rest on 5 equally priced gifts for her friends. Create and solve an equation to find how much each gift cost.
5. Stingular Wireless charges \$0.02 per text message plus a \$20 fee. If Austin was charged \$26.20 last month, create and solve an equation to find how many text messages he sent last month.
6. Mr. and Mrs. Peralta took their 5 children to see MS67's hottest new play. They spent a total of \$83, which included \$9.50 at the PTA sponsored concession stand, create and solve an equation to find out how much each of their tickets cost.

7. Simplify the following expression:  $\frac{1}{3}(18x - 30) + 10x$

8. Find the value of  $y$ :  $4 - 2y + 3y = 5y + 1$

9. Find the value of  $x$  that makes this true:  $7(x - 2) - 5 = 10$

10. Suppose the perimeter of the figure below is 210 feet. Find the value of  $x$ :



11. Sam took a taxi from his home to the airport. The driver charged an initial fee of \$4 plus \$1.50 per mile. If the total fare was \$25, create and solve an equation to find how far Sam traveled.

12. What is the product of 5 and  $(\frac{2}{3}n + 5)$ ?

13. Simplify:  $7d + 4 - d + 2$

14. A rectangular basketball court has a length that is 6 more than twice its width. If the perimeter is 228 feet, find the length of the basketball court.

15. Solve the equation:  $8(2x + 5) - x = 5(2x + 5)$