LESSON **2.4**

Name _____ Date _____

Practice A

For use with pages 85–89

Write the verbal sentence as an equation.

1. The sum of x and 5 is 13.
2. The difference of 10 and x is 4.
3. The product of -3 and x is 18.
4. The quotient of 20 and x is -5.

Tell whether the given value of the variable is a solution of the equation.

5. $x + 14 = 5; x = 9$
6. $24 - y = 18; y = 6$
7. $-42 = 7a; a = -6$
8. $\frac{c}{3} = -12; c = -4$

Match the equation with the corresponding question. Then solve.

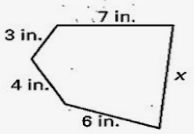
9. $m + 3 = 18$
10. $3m = 18$
11. $3 = m + 18$
12. $\frac{m}{3} = 18$

A. 3 equals what number plus 18?
B. What number plus 3 equals 18?
C. What number divided by 3 equals 18?
D. 3 times what number equals 18?

Solve the equation using mental math.

13. $g + 11 = 16$
14. $-6 + z = -14$
15. $w - 6 = -2$
16. $-12a = -60$
17. $-36 = 4d$
18. $\frac{k}{-8} = -7$

19. You are serving vegetable lasagna for a dinner party. There will be 15 people at the dinner. Each dish of lasagna will be cut into 6 pieces, and you expect each person to eat 2 pieces. How many dishes of lasagna do you need to make?
    a. Let x represent the number of dishes of lasagna you need. Write an expression for the number of pieces in x dishes of lasagna.
    b. How many pieces of lasagna do you need to feed 15 people?
    c. Use your answers from parts (a) and (b) to write an equation that you can use to find the number of dishes of lasagna needed.
    d. Solve your equation to find how many dishes of lasagna you need.
20. The perimeter of the figure is 28 inches.



a. Write and simplify an equation that you can use to find x.
b. Solve your equation. What is the value of x?

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