Name _____ Class _____ Date _____

2-5 Practice

Form K

Literal Equations and Formulas

Solve each equation for *y*. Then find the value of *y* for each value of *x*.

1. $y + 5x = 6$; $x = -1, 0, 1$

2. $8x - 4y = -12$; $x = -3, -1, 1$

3. $-3y = 2x - 9$; $x = -3, 0, 3$

4. $5x = -y + 6$; $x = 1, 2, 3$

5. $6y = -3x + 12$; $x = -4, -2, 0$

6. $-5y + 10x = 5$; $x = -2, 0, 2$

Solve each equation for *p*.

7. $xp + yp = z$

8. $n = \frac{p - k}{j}$

9. $a = b + cp$

10. $\frac{p + 3}{m} = -1$

Solve each problem. Round to the nearest tenth, if necessary. Use 3.14 for π.

11. What is the width of a rectangle with length 25 in. and area 375 in.^{2}?

12. What is the radius of a circle with circumference 5 cm?

13. A triangle has base 15 ft and area 60 ft^2. What is the height?

Name_____ Class_____ Date _____

2-5 Practice (continued) *Form K*

Literal Equations and Formulas

Solve each problem. Round to the nearest tenth, if necessary.

14. In baseball, a player's batting average is calculated by using the formula $\text{Average} = \frac{\text{Hits}}{\text{At Bats}}$. Find the number of times a player has batted if he has 24 hits and a batting average of approximately 0.320.

15. Dan drove 512 miles in 8 hours. What was his average speed for the trip?

Solve each equation for the given variable.

16. $-2z - xy = x + 7$ for x

17. $\frac{a}{b} - 8 = \frac{c}{d}$ for a

18. $6qr + 7rs - 2st = -9$ for r

19. $p = (\frac{m+n}{-5})$ for n

20. A large box shaped like a rectangular prism needs to be painted.

a. Write a formula for the area A to paint in terms of length l, width w, and height h.

b. Rewrite the formula to find l in terms of A, h, and w.

c. If h is 36 in., w is 28 in. and A is 6112 in.^{2}, what is the length of the prism?