READY TO GO ON?

Quiz for Lessons 2-1 Through 2-5

2-1 Solving Equations by Adding or Subtracting

Solve each equation.

1. $x - 32 = -18$ **2.** $1.1 = m - 0.9$ **3.** $j + 4 = -17$ **4.** $\frac{9}{8} = g + \frac{1}{2}$

5. When she first purchased it, Soledad's computer had 400 GB of hard drive space. After six months, there were only 313 GB available. Write and solve an equation to find the amount of hard drive space that Soledad used in the first six months.

2-2 Solving Equations by Multiplying or Dividing

Solve each equation.

6. $\frac{h}{3} = -12$ **7.** $-2.8 = \frac{w}{-3}$ **8.** $42 = 3c$ **9.** $-0.1b = 3.7$

10. A fund-raiser raised \$2400, which was $\frac{3}{5}$ of the goal. Write and solve an equation to find the amount of the goal.

2-3 Solving Two-Step and Multi-Step Equations

Solve each equation.

11. $2r + 20 = 200$ **12.** $\frac{3}{5}k + 5 = 7$ **13.** $5n + 6 - 3n = -12$ **14.** $4(x - 7) = 2$

15. A taxicab company charges \$2.10 plus \$0.80 per mile. Carmen paid a fare of \$11.70. Write and solve an equation to find the number of miles she traveled.

2-4 Solving Equations with Variables on Both Sides

Solve each equation.

16. $4x - 3 = 2x + 5$ **17.** $3(2x - 5) = 2(3x - 2)$

18. $2(2t - 3) = 6(t + 2)$ **19.** $7(x + 5) = -7(x + 5)$

20. On the first day of the year, Diego had \$700 in his savings account and started spending \$35 a week. His brother Juan had \$450 and started saving \$15 a week. After how many weeks will the brothers have the same amount? What will that amount be?

2-5 Solving for a Variable

21. Solve $2x + 3y = 12$ for x.   **22.** Solve $\frac{x}{r} = v$ for x.

23. Solve $5j + s = t - 2$ for t.   **24.** Solve $h + p = 3(k - 8)$ for k.

25. The formula for the area of a triangle is $A = \frac{1}{2}bh$. Solve the formula for h. If the area of a triangle is 48 cm², and its base measures 12 cm, what is the height of the triangle?