

**2-3****Practice**

Form K

**Solving Multi-Step Equations****Solve each equation. Check your answer.**

1.  $20 + g + g = 14$

2.  $7 + 4x - 9 = -6$

3.  $-12 = -5 - 6n + 11$

4.  $t + 10 - 4t = -11$

5.  $8 = 8p + 13 - 3p$

6.  $4y - 16 + 8y = -4$

**Write an equation to model each situation. Then solve the equation.**

7. A plumber finished three jobs on Tuesday. The first two only cost the owner the \$45 trip fee because they took very little time to complete. For the third job, the plumber charged the trip fee plus 6 times his hourly rate. If the plumber received a total of \$303 for the day, what is the hourly rate?

8. Three times a number plus 12 minus 5 times the same number is 22. What is the number?

**Solve each equation. Check your answer.**

9.  $4(-2d - 3) = 12$

10.  $5(5t - 2) = -35$

11.  $-2(a + 6) = -22$

12.  $60 = 6(6 - 2n)$

13.  $-14 = -4(9x - 1)$

14.  $-(5z + 12) = 18$

## 2-3

## Practice (continued)

Form K

## Solving Multi-Step Equations

15. Eli took the fleet of 8 vans for oil changes. All of the vans needed windshield wipers which cost \$24 per van. The total bill was \$432. Write an equation to find out what each oil change cost. Solve the equation.

Solve each equation. Choose the method you prefer. Check your answer.

16.  $\frac{m}{3} + \frac{1}{3} = \frac{2}{3}$

17.  $5r - \frac{1}{5} = \frac{4}{5}$

18.  $\frac{w}{9} - 6 = \frac{7}{9}$

19.  $1.75t - 4.5 = 7.75$

20.  $6z + 0.36 = 24.72$

21.  $7.85 - 2.15c = 20.75$

22. **Writing** Describe the first step you would take in solving  $12 = 7 - 3x + 5x$ . Explain.

23. **Writing** Describe how you would solve  $-8 = \frac{1}{9}(-9t + 27)$ .

Solve each equation. Round to the nearest hundredth if necessary.

24.  $11 + \frac{4x}{-5} = \frac{2}{3}$

25.  $\frac{5}{7}(k + 5) = -7$

26. **Reasoning** Can you solve the equation  $\frac{3}{4}(6x + 9) = 14$  by using the Division Property of Equality? Explain.