Homework 2-3

Solve each equation. Check your answer.

- **2.** 7 + 4x 9 = -6**1.** 20 + g + g = 14**3.** -12 = -5 - 6n + 11**4.** t + 10 - 4t = -11
- **5.** 8 = 8p + 13 3p**6.** 4v - 16 + 8v = -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

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_Class _____ Date____

Homework (continued)

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.** 1.75*t* – 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.

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