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**Course 3** • Equations and Inequalities

**7.** $\frac{x}{35}$= 11

**10.** 16 = $\frac{y}{-3}$

**13.** **CARS** Mrs. Alvarez bought a new car. Her monthly payments are $525. If she will pay a total of $25,200 in payments, write and solve a multiplication equation to find the number of payments.

**15.** **MEASUREMENT** Refer to the table. Write and solve an equation to find each quantity.

**14.** **POPULATION** The projected population of South Africa in 2010 is four times the projected population of Zambia. If the projected population of South Africa in 2010 is 48 million, write and solve a multiplication equation to find the projected population of Zambia.

**18.** $\frac{-144}{r}$ = –16

**17.** $\frac{-4}{x}$ = –8

**16.** 3 = $\frac{-84}{g}$

**Homework Practice**

***Solve Multiplication and Division Equations***

1 gallon = 8 pints

1 gallon = 4 quarts

1 quart = 4 cups

1 quart = 2 pints

1 pint = 2 cups

**Customary System**

**Conversions (capacity)**

**Solve each equation.**

**b.** the number of gallons in 104 pints

**a.** the number of quarts in 24 pints

**12.** $\frac{a}{25}$= –13

**11.** –9 = $\frac{n}{8}$

**9.** $\frac{c}{-12}$ = 43

**8.** $\frac{v}{4}$= 20

**6.** –56 = 7*d*

**5.** –12*m* = –72

**4.** –3*p* = 24

**3.** 36 = 9*b*

**2.** 8*h* = 64

**1.** 5*s* = 45

**Solve each equation. Check your solution.**

PERIOD

 DATE

NAME \_\_\_\_\_\_