## **Practice C**

For use with the lesson "Solve Proportions Using Cross Products"

Solve the proportion.

**1.** 
$$\frac{38}{56} = \frac{19}{x}$$

**2.** 
$$\frac{56}{a} = \frac{14}{3}$$

3. 
$$\frac{7m}{8} = \frac{21}{24}$$

**4.** 
$$\frac{4+w}{16} = \frac{27}{48}$$

**5.** 
$$\frac{7}{5} = \frac{2c-1}{45}$$

**6.** 
$$\frac{18}{n} = \frac{54}{n+40}$$

7. 
$$\frac{d}{d-30} = \frac{13}{8}$$

**8.** 
$$\frac{32-y}{y} = \frac{6}{10}$$

**9.** 
$$\frac{p+15}{42} = \frac{p-5}{14}$$

**10.** 
$$\frac{2z}{z+7} = \frac{24}{54}$$

**11.** 
$$\frac{7}{2} = \frac{b+4.5}{b-0.5}$$

**12.** 
$$\frac{4}{c+1.8} = \frac{6}{c+4.3}$$

- **13.** In the proportion  $\frac{2}{h} = \frac{k}{10}$ , what happens to the value of h as the value of k decreases? *Explain*.
- **14. CD Burners** The Model A CD burner burns 60 minutes of data in about 1.15 minutes. The Model B CD burner burns 60 minutes of data in about 1.5 minutes. How much longer will it take to burn 80 minutes of data onto a CD using the Model B burner than using the Model A burner?
- **15. Reading a Map** On the map, the distance between City 1 and City 2 is 2.7 centimeters. Someone has made a note on the map that the actual distance between City 1 and City 2 is 54 kilometers. What scale is used on the map?



**16. Model Railroading** Model railroads use a variety of different scales to model trains and features such as bridges. The O scale uses a scale of 1 in.: 48 ft, the N scale uses a scale of 1 in.: 160 ft, and the S scale uses a scale of 1 in.: 64 ft. Models of three bridges in three different scales are shown in the table below. Estimate the actual lengths of the bridges.

Scale	О	N	S
Bridge	Golden Gate	Lewis and Clark	Francis Scott Key
Model Length (in.)	87.5	7.5	18.75

**17. Fish** At an aquarium, the ratio of freshwater fish to saltwater fish is 3 to 5. Estimate the number of each kind of fish if the aquarium has 640 fish. How many more saltwater fish are there than freshwater fish?