## 3-6

## **Practice**

## Ratios and Proportions

Use cross products to determine whether each pair of ratios forms a proportion. Write yes or no.

1. 
$$\frac{7}{6}$$
,  $\frac{52}{48}$ 

4. 
$$\frac{12}{11}$$
,  $\frac{108}{99}$   $\begin{cases} your \\ cross-\\ products \end{cases}$ 

7. 
$$\frac{3.4}{5.2}$$
,  $\frac{7.14}{10.92}$ 

2. 
$$\frac{3}{11}$$
,  $\frac{15}{66}$ 

5. 
$$\frac{8}{9}$$
,  $\frac{72}{81}$ 

8. 
$$\frac{1.7}{1.2}$$
,  $\frac{2.9}{2.4}$ 

3. 
$$\frac{18}{24}$$
,  $\frac{36}{48}$ 

6. 
$$\frac{1.5}{9}$$
,  $\frac{1}{6}$ 

9. 
$$\frac{7.6}{1.8}$$
,  $\frac{3.9}{0.9}$ 



Solve each proportion. If necessary, round to the nearest hundredth.

10. 
$$\frac{5}{a} = \frac{30}{54}$$

13. 
$$\frac{28}{49} = \frac{4}{w}$$

**16.** 
$$\frac{2}{y} = \frac{10}{60}$$

19. 
$$\frac{6}{61} = \frac{12}{h}$$

**22.** 
$$\frac{7}{9} = \frac{8}{6}$$

**25.** 
$$\frac{v}{0.23} = \frac{7}{1.61}$$

**28.** 
$$\frac{7}{a-4} = \frac{14}{6}$$

31. 
$$\frac{5}{12} = \frac{x+1}{4}$$

11. 
$$\frac{v}{46} = \frac{34}{23}$$

**14.** 
$$\frac{3}{u} = \frac{27}{162}$$

17. 
$$\frac{5}{11} = \frac{35}{x}$$

**20.** 
$$\frac{g}{16} = \frac{6}{4}$$

**23.** 
$$\frac{3}{a} = \frac{5}{6}$$

**26.** 
$$\frac{3}{0.72} = \frac{12}{b}$$

**29.** 
$$\frac{3}{12} = \frac{2}{v+6}$$

**32.** 
$$\frac{r+2}{7} = \frac{5}{7}$$

12. 
$$\frac{40}{56} = \frac{k}{7}$$

**15.** 
$$\frac{y}{3} = \frac{48}{9}$$

18. 
$$\frac{3}{51} = \frac{z}{17}$$

**21.** 
$$\frac{14}{49} = \frac{2}{a}$$

**24.** 
$$\frac{m}{6} = \frac{5}{8}$$

**27.** 
$$\frac{6}{n} = \frac{3}{0.51}$$

**30.** 
$$\frac{m-1}{8}=\frac{2}{4}$$

33. 
$$\frac{3}{7} = \frac{x-2}{6}$$

- **34. PAINTING** Ysidra paints a room that has 400 square feet of wall space in  $2\frac{1}{2}$  hours. At this rate, how long will it take her to paint a room that has 720 square feet of wall space?
- **35. VACATION PLANS** Walker is planning a summer vacation. He wants to visit Petrified National Forest and Meteor Crater, Arizona, the 50,000-year-old impact site of a large meteor. On a map with a scale where 2 inches equals 75 miles, the two areas are about  $1\frac{1}{2}$  inches apart. What is the distance between Petrified National Forest and Meteor Crater?