

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

1. $\frac{3}{2}, \frac{21}{14}$

3. $\frac{2.3}{3.4}, \frac{3.0}{3.6}$

5. $\frac{21.1}{14.4}, \frac{1.1}{1.2}$

2. $\frac{8}{9}, \frac{12}{18}$

4. $\frac{4.2}{5.6}, \frac{1.68}{2.24}$

6. $\frac{5}{2}, \frac{4}{1.6}$

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

7. $\frac{4}{x} = \frac{2}{10}$

11. $\frac{6}{8} = \frac{7}{a}$

14. $\frac{2.405}{3.67} = \frac{s}{1.88}$

8. $\frac{1}{y} = \frac{3}{15}$

12. $\frac{16}{7} = \frac{9}{b}$

15. $\frac{6}{14} = \frac{7}{x-3}$

9. $\frac{6}{5} = \frac{x}{15}$

13. $\frac{1}{0.19} = \frac{12}{n}$

16. $\frac{5}{3} = \frac{6}{x+2}$

Complete.

17. Seth earns \$152 in 4 days. At that rate, how many days will it take him to earn \$532?

18. Lanette drove 248 miles in 4 hours. At that rate, how long will it take her to drive an additional 93 miles?

19. A blueprint for a house states that 2.5 inches equals 10 feet. If the length of a wall is 12 feet, how long is the wall in the blueprint?

20. A collector's model racecar is scaled so that 1 inch on the model equals $6\frac{1}{4}$ feet on the actual car. If the model is $\frac{2}{3}$ inch high, how high is the actual car?

21. A research study shows that three out of every twenty pet owners got their pet from a breeder. Of the 122 animals cared for by a veterinarian, how many would you expect to have been bought from a breeder?