Name _____   Date _____

Name the cross products of the proportion.

1. $\dfrac{n}{11} = \dfrac{40}{55}$

2. $\dfrac{4}{9} = \dfrac{1}{x}$

3. $\dfrac{1.8}{1.9} = \dfrac{b}{3.8}$

4. $\dfrac{a+6}{21} = \dfrac{4}{7}$

5. $\dfrac{5x}{x+1} = \dfrac{30}{9}$

6. $\dfrac{2.2}{3.3} = \dfrac{a-2}{a-1}$

Solve the proportion.

7. $\dfrac{3}{5} = \dfrac{21}{m}$

8. $\dfrac{12}{7} = \dfrac{60}{d}$

9. $\dfrac{24}{x} = \dfrac{48}{60}$

10. $\dfrac{5}{7} = \dfrac{3w}{21}$

11. $\dfrac{2w}{16} = \dfrac{30}{80}$

12. $\dfrac{2z}{24} = \dfrac{6}{8}$

13. $\dfrac{8}{9} = \dfrac{30+a}{45}$

14. $\dfrac{9-y}{44} = \dfrac{5}{22}$

15. $\dfrac{26}{15} = \dfrac{104}{70-w}$

16. $\dfrac{35}{16} = \dfrac{c-8}{2}$

17. $\dfrac{1}{9} = \dfrac{a}{a+24}$

18. $\dfrac{2}{n} = \dfrac{14}{n+30}$

A map has a scale of 1 in. : 38 ft. Use the given map distance to find the actual distance.

19. 5.5 in.

20. 2.25 in.

21. 1.75 in.

22. **Concrete** You are making up your own mix of concrete to patch a set of stairs. In order to have the proper mix, you need to mix 1 part of Portland cement with 2 parts of sand and 3 parts of gravel.

   a. How many total parts are in one batch of concrete?

   b. You make a mix with 4 parts of sand. How many total parts of cement, sand, and gravel are in your mix?

23. **Architectural Firm** An architectural firm makes a model of a science center they are building. The ratio of the model to the actual size is 1 in. : 85 ft. Estimate the height of the building if the model is 1.5 inches tall.

1.5 in.
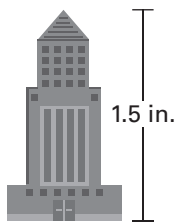
24. **Tall Buildings** You made a model of the Space Needle in Seattle, Washington, for a report on architecture in the United States. You used a scale of 1 in. : 50 ft. Your model is 12.1 inches tall. Estimate the actual height of the Space Needle.