

Name \_\_\_\_\_

Date \_\_\_\_\_

LESSON  
3.6**Practice B**

For use with pages 168–173

**Name the cross products of the proportion.**

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

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

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

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

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

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

**Solve the proportion.**

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

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

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

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

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

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

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

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

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

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

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

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

**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.

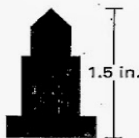
21. 1.75 in.

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.



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.