

Practice C

For use with pages 457–464

Rewrite the fraction so that the numerator and denominator have the same units. Then simplify.

1. $\frac{4 \text{ days}}{16 \text{ hours}}$

2. $\frac{18 \text{ yd}}{6 \text{ ft}}$

3. $\frac{0.6 \text{ km}}{200 \text{ m}}$

4. $\frac{80 \text{ mm}}{0.6 \text{ cm}}$

5. $\frac{5 \text{ gal}}{4 \text{ qt}}$

6. $\frac{18 \text{ in.}}{3 \text{ yd}}$

7. $\frac{25 \text{ min}}{2 \text{ hr}}$

8. $\frac{220 \text{ yd}}{3 \text{ mi}}$

Solve the proportion.

9. $\frac{x}{8} = \frac{5}{20}$

10. $\frac{y}{8} = \frac{6}{15}$

11. $\frac{5}{13} = \frac{m}{52}$

12. $\frac{8}{x} = \frac{12}{x+6}$

13. $\frac{6}{y+4} = \frac{5}{y-7}$

14. $\frac{5}{2y-7} = \frac{3}{y-3}$

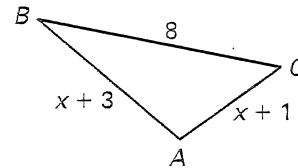
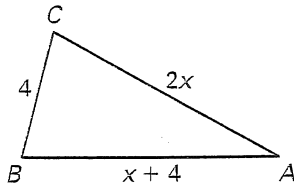
Solve.

15. The perimeter of a rectangle is 40 feet. The ratio of the width to the length is 2:3. Find the length and the width.
16. The area of a rectangle is 192 square feet. The ratio of the width to the length is 3:4. Find the length and the width.
17. The measures of the angles in a triangle are in the extended ratio of 3:4:5. Find the measures of the angles.
18. The measures of the angles in a triangle are in the extended ratio of 2:5:8. Find the measures of the angles.

You are given an extended ratio that compares the lengths of the sides of the triangle. Find the length of each side.

19. $AC : BC : AB$ is 2:1:2

20. $AB : BC : AC$ is 3:4:2



In Exercises 21 and 22, use the following information.

An architect wishes to represent the length of a room with a 5 inch segment.

21. If the room is actually 18 feet long, write the ratio of the scale length to the actual length.
22. Find the scale width, if the room is 12 feet wide.