

Simplify the ratio.

1. \$12:\$16

$\frac{3}{4}$ OR 3:4

2. $\frac{32 \text{ in}^2}{8 \text{ in}^2}$

$\frac{4}{1}$ OR 4:1

3. $\frac{6 \text{ cm}}{14 \text{ cm}}$

$\frac{3}{7}$ OR 3:7

4. $\frac{10 \text{ in}}{2 \text{ ft}}$

$\frac{5}{12}$ OR 5:12

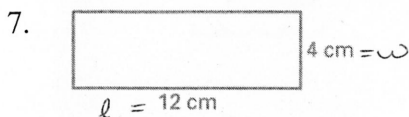
5. 3 gallons: 10 quarts

$\frac{6}{5}$ OR 6:5

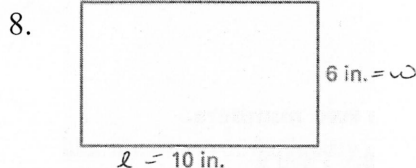
6. 28 oz: 2 lb

$\frac{7}{8}$ OR 7:8

Find the ratio of the **width to the length** of the rectangle. Leave as a simplified the ratio.

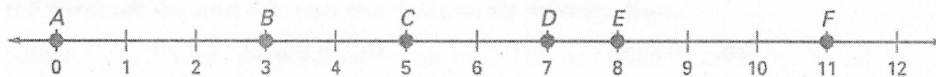


$\frac{1}{3}$ OR 1:3



$\frac{3}{5}$ OR 3:5

Use the number line to find the ratio of the distances. Leave as a simplified the ratio.



9. $\frac{AB}{CF} = \frac{1}{2}$

10. $\frac{BF}{CD} = \frac{4}{1}$

11. $\frac{DE}{AC} = \frac{1}{5}$

12. $\frac{BE}{AD} = \frac{5}{7}$

13. The area of a rectangle is 525 cm^2 . The ratio of the length to the width is 7:3. Find the length and the width.

Length = 35cm

Width = 15cm

14. The perimeter of a rectangle is 56 inches. The ratio of the length to the width is 6:1. Find the area of the rectangle.

Length = 24in

$A = 96 \text{ in}^2$

Width = 4in

15. The measures of the angles of a triangle are in the extended ratio given. Find the measure of the angles of the triangle.

7:14:15

$35^\circ, 70^\circ, 75^\circ$

Solve the proportion.

$$16. \frac{4}{5} = \frac{x}{15}$$

$$\underline{x = 12}$$

$$17. \frac{5}{8} = \frac{20}{y}$$

$$\underline{y = 32}$$

$$18. \frac{z+2}{4} = \frac{27}{12}$$

$$\underline{z = 7}$$

$$19. \frac{3}{x} = \frac{1}{x-6}$$

$$\underline{x = 9}$$

$$20. \frac{3}{m+5} = \frac{2}{m+1}$$

$$\underline{m = 7}$$

$$21. \frac{-1}{2k+3} = \frac{5}{3k-2}$$

$$\underline{k = -1}$$

Find the geometric mean of the two numbers.

22. 2 and 8

$$\underline{= 4}$$

23. 7 and 14

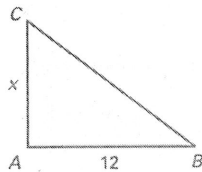
$$\underline{= 7\sqrt{2} \text{ OR } 9.9}$$

24. 8 and 16

$$\underline{= 8\sqrt{2} \text{ OR } 11.3}$$

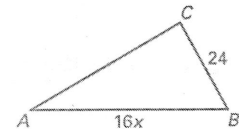
The ratio of the two side lengths for the triangle is given. Solve for the variable.

25. $AC:AB$ is 3:4



$$\underline{x = 9 \text{ units}}$$

26. $AB:CB$ is 2:1



$$\underline{x = 3 \text{ units}}$$

You purchase a scale model of the Golden Gate Bridge which is located near San Francisco, California. The model states that the scale is 1 inch: 50 feet.

27. The actual length of the bridge is 8980 feet. What is the length of the model?

$$\underline{\text{Length of Model} = 179.5 \text{ inches}}$$

28. The model is approximately 15 inches tall. What is the actual height of the bridge?

$$\underline{\text{Actual Height} = 750 \text{ ft}}$$