Similarity and Ratios

Each pair of figures is similar. Find the missing side.

1) \[ \frac{?}{9} = \frac{15}{?} \]

2) \[ \frac{?}{3} = \frac{5}{4} \]

3) \[ \frac{12}{15} = \frac{?}{4} \]

4) \[ \frac{8}{?} = \frac{3}{3} \]

Solve.

5) Two rectangles are similar. The first is 6 feet wide and 20 feet long. The second is 15 feet wide. What is the length of the second rectangle? ________________

6) Two rectangles are similar. One is 2.5 meters by 9 meters. The longer side of the second rectangle is 22.5 meters. What is the other side of the second rectangle? ________________

7) A building casts a shadow 24 ft long. At the same time a girl 5 ft tall casts a shadow 2 ft long. How tall is the building? ________________

8) The scale of a map of Texas is 2 inches: 45 miles. If you measure the distance from Dallas to Martin County as 14.4 inches, approximately how far is Martin County from Dallas? ________
Answers

Similarity and ratios

1) 12
2) 2
3) 5
4) 15
5) 50 feet
6) 6.25 meters
7) 60 feet
8) 324 miles