Kuta Software - Infinite Pre-Algebra

Similar Figure Word Problems

HOSWECS

Date	Period

Answer each question and round your answer to the nearest whole number.

1) A 6 ft tall tent standing next to a cardboard box casts a 9 ft shadow. If the cardboard box casts a shadow that is 6 ft long then how tall is it?

4 ft.

2) A telephone booth that is 8 ft tall casts a shadow that is 4 ft long. Find the height of a lawn ornament that casts a 2 ft shadow.

4 ft

3) A map has a scale of 3 cm: 18 km. If Riverside and Smithville are 54 km apart then they are how far apart on the map?

9 cm

4) Find the distance between Riverside and Milton if they are 12 cm apart on a map with a scale of 4 cm: 21 km.

63 km

5) A model house is 12 cm wide. If it was built with a scale of 3 cm: 4 m then how wide is the real house?

16 m

6) Oak Grove and Salem are 87 mi from each other. How far apart would the cities be on a map that has a scale of 5 in : 29 mi?

15 in

7) A map has a scale of 2 in : 6 mi. If Clayton and Centerville are 10 in apart on the map then how far apart are the real cities?

30 mi

8) A statue that is 12 ft tall casts a shadow that is 15 ft long. Find the length of the shadow that a 8 ft cardboard box casts.

10 ft

Answer each question and round your answer to the nearest tenth.

9) A model house has a scale of 1 in: 2 ft. If the real house is 26 ft wide then how wide is the model house?

13 in

10) A 6.5 ft tall car standing next to an adult elephant casts a 33.2 ft shadow. If the adult elephant casts a shadow that is 51.5 ft long then how tall is it?

10.1 ft

11) If a 42.9 ft tall flagpole casts a 253.1 ft long shadow then how long is the shadow that a 6.2 ft tall woman casts?

36.6 ft

12) Georgetown and Franklin are 9.7 in apart on a map that has a scale of 1.1 in: 15 mi. How far apart are the real cities?

132.3 mi