Similar Figure Word Problems

Answer each question, showing all work, and round your answer to the nearest whole number. Draw a picture if needed.

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

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

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

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

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

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

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

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

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

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

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

12) A picture 4in tall and 9in wide is to be scaled to 2.5in tall to be displayed on a web page. How wide should the picture be on the web page for the two pictures to be similar?

13) If a 49.2 ft tall flagpole casts a 253.1 ft long shadow then how long is the shadow that a 6.2ft tall woman casts?

14) A company's logo is in the shape of an isosceles triangle with two sides that are each 2.4in long and one side that is 1.8in long. On a billboard, the triangles in the logo has two sides that are each 8ft long. What is the length of the third side of the triangle on the billboard?