

Similar Figure Word Problems

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?

$$3 \text{ ft}$$

- 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.

$$6 \text{ ft}$$

- 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?

$$18 \div 3 = 6 \\ 3 \times 3 = 9 \text{ cm}$$

- 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.

$$4 \div 3 = 12 \\ 21 \times 3 = 63 \text{ km}$$

- 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?

$$3 \times 4 = 12 \\ 4 \times 4 = 16 \text{ m}$$

- 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?

$$29 \div 5 = 87 \\ 5 \times 7 = 15 \text{ in}$$

- 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?

$$2 \times 5 = 10 \\ 6 \times 5 = 30 \text{ mi}$$

- 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.

$$12 \div 1/3 = 8 \\ 15 \div 1/3 = 10 \text{ ft}$$

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?

$$2 \times 13 = 26 \\ 1 \times 13 = 13 \text{ in}$$

- 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?

$$10.2 \text{ ft}$$

- 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?

$$31.1 \text{ ft}$$

- 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?

$$130.5 \text{ mi}$$

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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 |
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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 |

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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 |