

Similar Figures Mini-Lesson

Today's Learning Goal: *At the end of today's lesson, you should be able to solve problems involving similar figures*

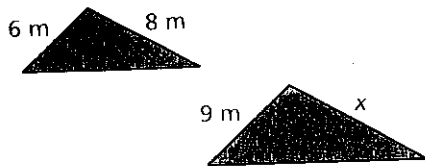
Similar figures are figures that have the _____ but not necessarily the _____.

Similar figures have matching angles, which are called _____ and matching sides, which are called _____.

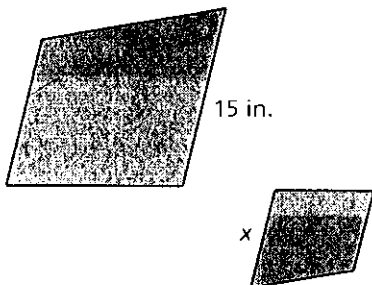
In order to find an unknown measure in a similar figure, you use a _____. Corresponding side lengths in similar figures are proportional.

Examples:

1. The two triangles are similar. Find the value of x .



2. The two quadrilaterals are similar. The ratio of their perimeters is 12:5. Find the value of x .

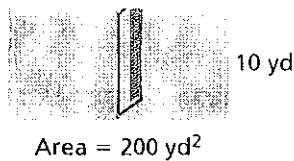
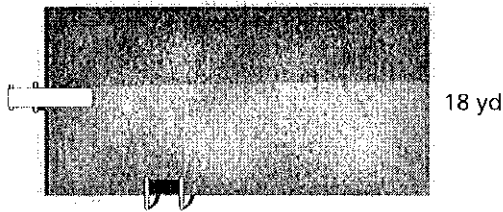


3. A 6.5 foot tall car standing next to an adult elephant casts a 33.2 foot shadow. If the adult elephant casts a shadow that is 51.5 feet long, then how tall is it?

4. A person that is 6 feet tall casts a 3-foot long shadow. A nearby palm tree casts a 15-foot long shadow. What is the height h of the palm tree?

5. A 6 feet tall tent standing next to a cardboard box casts a 9 foot shadow. If the cardboard box casts a shadow that is 6 feet long, how tall is the box?

6. A swimming pool is similar in shape to a volleyball court. What is the area of the pool?



Progress Monitoring: *How do you feel about your level of understanding of solving problems involving similar figures? (Rate yourself from 0 (don't understand at all) to 10 (doing awesome))*

