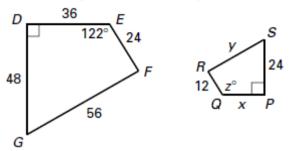
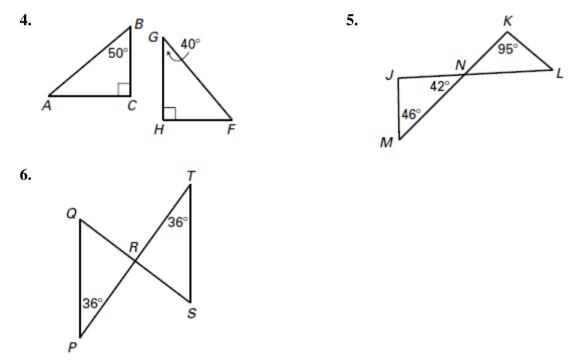
Name

In the diagram, *DEFG* ~ *PQRS*.

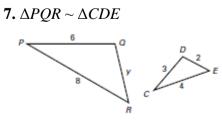


- 1. Find the scale factor of *DEFG* to *PQRS*.
- **2.** Find the value of *x*.
- **3.** Find the value of *z*.

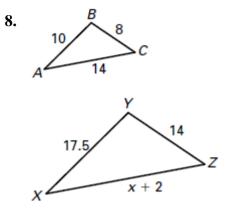
Determine whether the triangles are similar. If they are similar, write a similarity statement and explain why they are similar.



Given similar triangles, find the value of *y*.



Determine the value of x that makes  $\triangle ABC \sim \triangle XYZ$ .



## Find the perimeter of polygon *B* given that polygon *A* and polygon *B* are similar.

**9.** The ratio of corresponding sides of polygon *A* to polygon *B* is 3:4. The perimeter of polygon *A* is 12 meters.

10. At an amusement park there are two Ferris Wheels. The taller one is 126 feet tall and casts a 45 foot shadow. The smaller one casts a 15 foot shadow. How tall is the smaller FerrisWheel?

11. Sami has two trophies next to each other sitting in the window of his room. Hiss football trophy is 7 inches tall and his basketball trophy is 13 inches tall. As the light shines in, the basketball trophy's shadow measures 26 inches. How long is the football trophy's shadow?