Geometry: Chapter 6.1-6.3 Quiz
Show all work and box all final answers.
In the diagram, $D E F G \sim P Q R S$.


1. Find the scale factor of $D E F G$ to $P Q R S$.
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.
4.

5.

6.


Given similar triangles, find the value of $\boldsymbol{y}$.
7. $\triangle P Q R \sim \triangle C D E$


## Determine the value of $x$ that makes $\triangle A B C \sim \triangle X Y Z$.

8. 



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?

