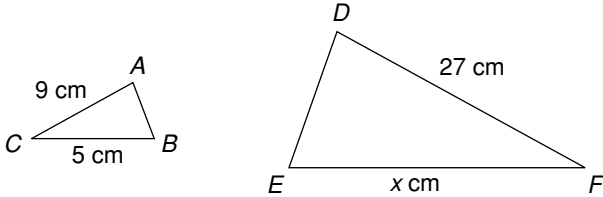


LESSON
2-7

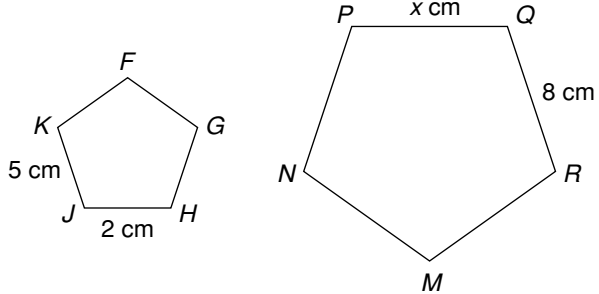
Practice B
Applications of Proportions

Find the value of x in each diagram.

1. $\triangle ABC \sim \triangle DEF$



2. $FGHJK \sim MNPQR$



3. A utility worker is 5.5 feet tall and is casting a shadow 4 feet long. At the same time, a nearby utility pole casts a shadow 20 feet long. Write and solve a proportion to find the height of the utility pole.

4. A cylinder has a radius of 3 cm and a length of 10 cm. Every dimension of the cylinder is multiplied by 3 to form a new cylinder. How is the ratio of the volumes related to the ratio of corresponding dimensions?

5. A rectangle has an area of 48 in^2 . Every dimension of the rectangle is multiplied by a scale factor, and the new rectangle has an area of 12 in^2 . What was the scale factor?
