9-6

Name _____ Date _____

Size and Shape (pages 379–382)

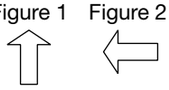
You can compare figures that look alike in two different ways.

Comparing Figures for Size and Shape	Two figures that have the same shape and angles but are different in size are called **similar figures**. The symbol ~ means *is similar to*. Figures that are exactly the same size and shape are called **congruent figures**. The symbol ≅ means *is congruent to*.

EXAMPLES

A Is Figure 1 similar or congruent to Figure 2?

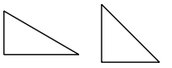
Figure 1 Figure 2



Although the two figures are turned differently, they are exactly the same size and shape, so they are congruent figures.

B Is Figure 1 similar or congruent to Figure 2?

Figure 1 Figure 2

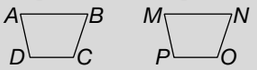


Although the figures are both right triangles, they are not the same size and they are not the same shape, so they are neither similar nor congruent.

Try These Together

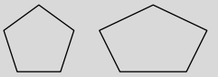
1. Figure 1 ≅ Figure 2. Which side of Figure 1 corresponds to side $\overline{MN}$ of Figure 2?

Figure 1 Figure 2



HINT: Find the side that is in the matching position.

2. Is this pair of polygons *congruent*, *similar*, or *neither*?

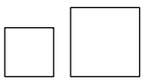


HINT: Are the figures the same shape? Are they the same size? Are the corresponding angles equal?

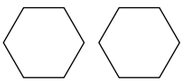
PRACTICE

***Tell whether each pair of polygons is* congruent, similar, *or* neither.**

3.



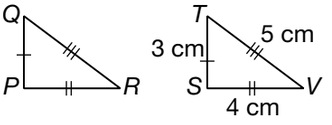
4.



5. $\triangle PQR$ is congruent to $\triangle STV$.

a. What side corresponds to side $\overline{TV}$?

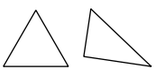
b. What is the measure of side $\overline{PR}$?



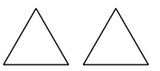
6. **Standardized Test Practice** Which two figures are congruent?

A

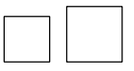
B



C



D



Answers: 1. $\overline{AB}$ 2. neither 3. similar 4. congruent 5a. $\overline{QR}$ 5b. 4 cm 6. C