

LESSON **7-3** **Technology Lab Recording Sheet** pp. 468–469
Predict Triangle Similar Relationships

Try This

Activity 1

3. Measure the side lengths of both triangles. Divide each side length of $\triangle ABC$ by the corresponding side length of $\triangle DEF$. Compare the resulting ratios. What do you notice?

Try This

1. What theorem guarantees that the third pair of angles in the triangles are also congruent?

2. Will the ratios of corresponding sides found in Step 3 always be equal?

Drag a vertex $\triangle ABC$ or an endpoint of \overline{DE} to investigate this question.

State a conjecture based on your results.

Activity 2

3. Measure the angles of both triangles. What do you notice?

Try This

3. Did the construction of the triangles with three pairs of sides in the same ratio guarantee that the corresponding angles would be congruent?

State a conjecture based on these results.

LESSON

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Technology Lab Recording Sheet

Predict Triangle Similar Relationships continued

4. Compare your conjecture to the SSS Congruence Theorem from Chapter 4.

How are they similar?

How are they different?

Activity 3

3. Measure each side length and determine the relationship between corresponding sides of $\triangle ABC$ and $\triangle DEF$.

4. Measure the angles of both triangles. What do you notice?

Try This

5. Tell whether $\triangle ABC$ is similar to $\triangle DEF$. Explain your reasoning.

6. Write a conjecture based on the activity. What congruency theorem is related to your conjecture?
