Name:_____Period:____

Proving SSS

❶ Use a straightedge to draw a large triangle. Label it △*ABC*.

❷ Open your compass to measure $\overline{AB}$ of △*ABC*. Use this length to construct $\overline{DE}$ so that it is congruent to $\overline{AB}$.

❸ Open your compass to measure $\overline{AC}$. Use this length to draw an arc with the point of the compass at *D*.

❹ Open your compass to measure $\overline{BC}$. Use this length to draw an arc centered at *E* that intersects the arc from Step 3.

❺ Label the point of intersection *F*. Then draw △*DEF*.

Proving ASA

❶ Draw a segment 3 inches long. Label the endpoints *A* and *B*.

❷ Draw an angle measuring 45° at point *A*.

❸ Draw an angle measuring 30° at point *B*.

❹ Label the point where the angle rays intersect as point *C*.

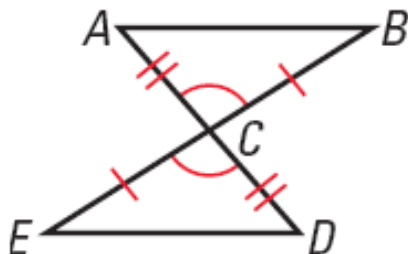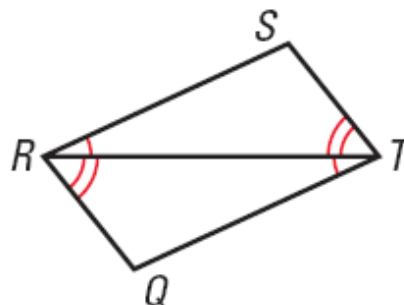**❺** Compare your triangle to the triangles drawn by your classmates. Are the triangles congruent?

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Decide whether there is enough information to show the two triangles are congruent. If so, **tell which congruence postulate you would use**. **Write the congruence statement**. [*example:* $\triangle ABC \cong \triangle XYZ$]
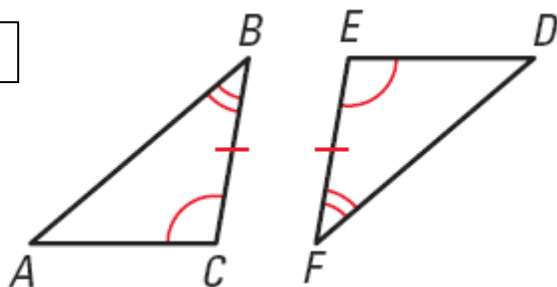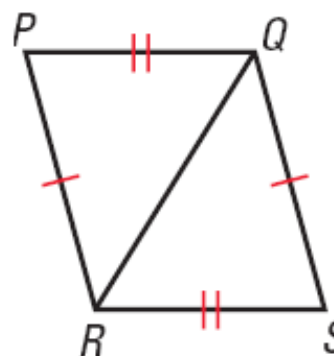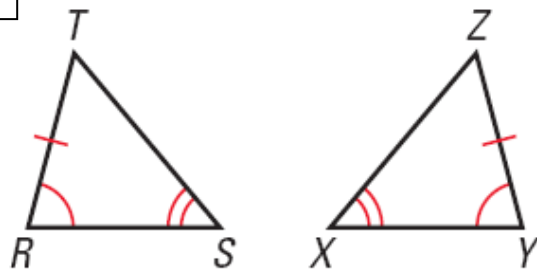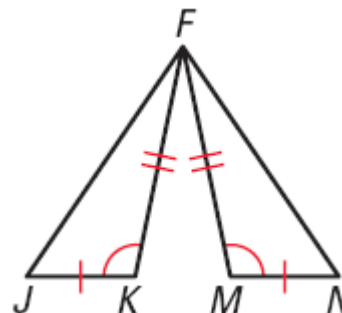
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