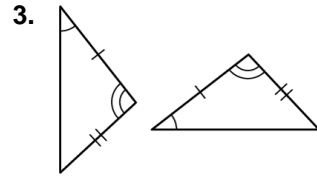
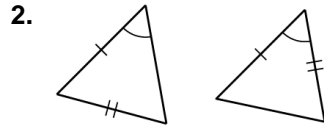
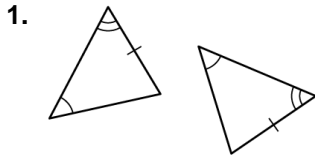


5.6

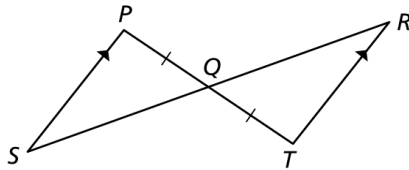
Practice A

In Exercises 1–3, decide whether enough information is given to prove that the triangles are congruent. If so, state the theorem you would use.



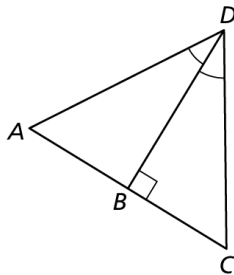
4. **Given:** $\overline{PS} \cong \overline{RT}$, $\overline{PQ} \cong \overline{TQ}$

Prove: $\triangle PSQ \cong \triangle TRQ$

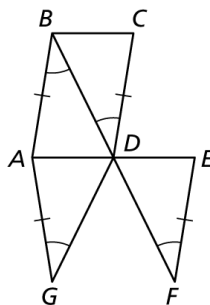


5. **Given:** \overline{BD} bisects $\angle ADC$, $\overline{BD} \perp \overline{AC}$

Prove: $\triangle ABD \cong \triangle CBD$



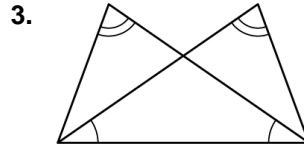
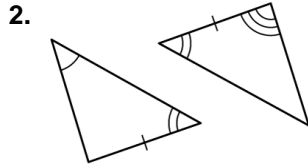
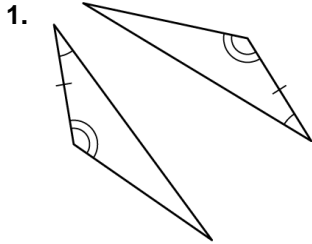
6. Use the information given in the figure and the triangle congruence theorems to determine which pairs of triangles you can prove are congruent. Show your steps. Are there any pairs of triangles that cannot be proven congruent? Explain.



5.6

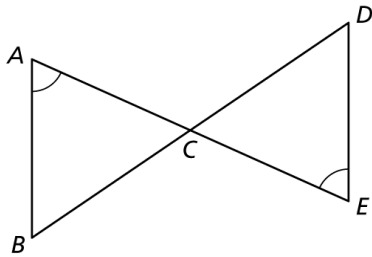
Practice B

In Exercises 1–3, decide whether enough information is given to prove that the triangles are congruent. If so, state the theorem you would use.



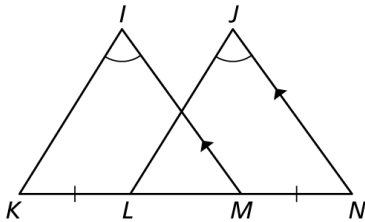
4. **Given:** \overline{BD} bisects \overline{AE} , $\angle A \cong \angle E$

Prove: $\triangle ABC \cong \triangle EDC$



5. **Given:** $\angle I \cong \angle J$, $\overline{IM} \cong \overline{JN}$ and $\overline{KL} \cong \overline{MN}$

Prove: $\triangle JKM \cong \triangle JLN$



6. Write a paragraph proof to show that opposite sides of a parallelogram are congruent.

Given: $QRST$ is a parallelogram.

Prove: $\overline{QR} \cong \overline{TS}$ and $\overline{RS} \cong \overline{QT}$

(Hint: Draw \overline{RT} .)

