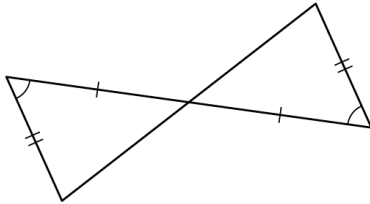


5.3

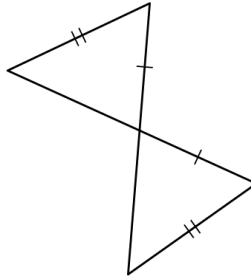
Practice A

In Exercises 1 and 2, decide whether enough information is given to prove that the triangles are congruent using the SAS Congruence Theorem (Theorem 5.5). Explain.

1.

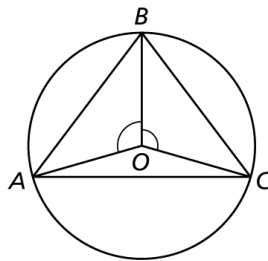


2.

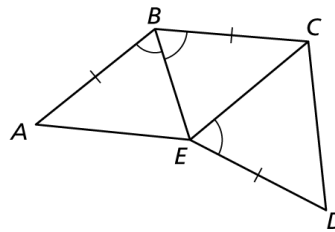


In Exercises 3 and 4, use the given information to name two congruent triangles. Explain your reasoning.

3.

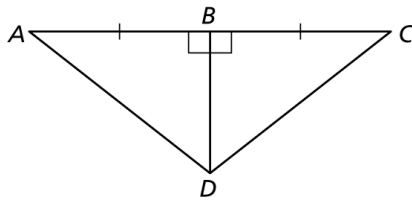


4.



- Your friend claims that the SAS Congruence Theorem (Theorem 5.5) will apply to a triangle and its image after the triangle has been translated, reflected, rotated, and dilated. Is your friend correct? Explain your reasoning.
- Given:** $\angle ABD$ and $\angle CBD$ are right angles and \overline{BD} bisects \overline{AC} .

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

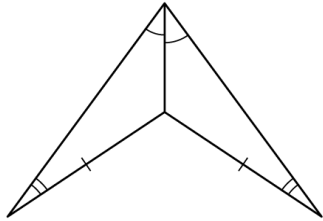


5.3

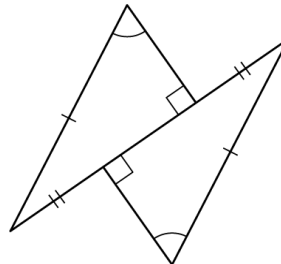
Practice B

In Exercises 1 and 2, decide whether enough information is given to prove that the triangles are congruent using the SAS Congruence Theorem (Theorem 5.5). Explain.

1.

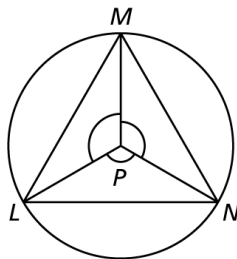


2.

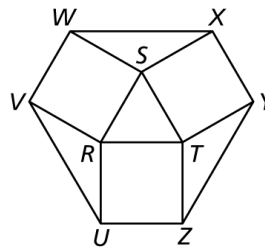


In Exercises 3 and 4, identify three congruent triangles and explain how to show that they are congruent.

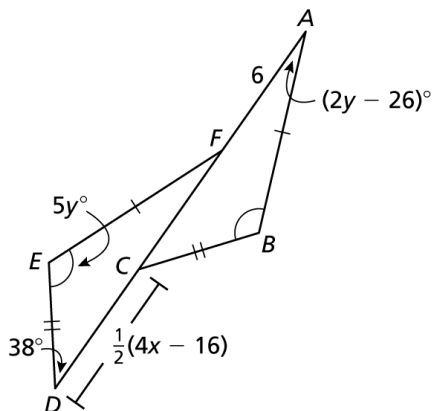
3. P is the center of the circle.



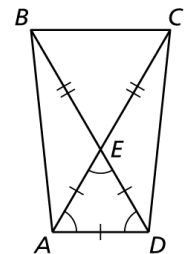
4. Three squares border equiangular and equilateral $\triangle RST$.



5. Use the information given in the figure to find the values of x and y .



6. **Given:** $\overline{EB} \cong \overline{EC}$, $\triangle AED$ is equilateral and equiangular.



Prove: $\triangle ACD \cong \triangle DBA$