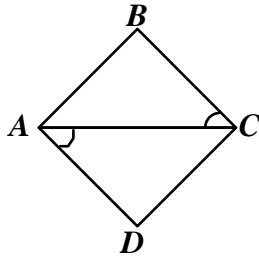


NAME: \_\_\_\_\_

1. Explain why  $\triangle ABC$  cannot be shown to be congruent to  $\triangle CDA$ .



2. Give an example of two triangles in which two sides and an angle are congruent, but the triangles are not congruent.
3. Make up a problem that involves congruent triangles and CPCTC. Include your solution.
4. Given  $\triangle ABC$ , describe how to construct a triangle congruent to  $\triangle ABC$  using the SAS postulate. Then describe how to construct a triangle congruent to  $\triangle ABC$  using the SSS postulate.

Although  $\angle CAD \cong \angle ACB$  and  $\overline{AC}$  is congruent to itself, we do not have any other information. To prove the triangles are congruent, we would need to know that one other pair of sides or one other pair of angles was congruent.

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[2] Check students' work.

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[3] Check students' work.

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Using SAS, copy side  $\overline{AB}$ ; then copy  $\angle A$  at one end and copy  $\overline{AC}$  along that line. Using SSS, copy one side, and from each endpoint, make an arc using the other sides as radii. Connect the point of intersection of the arcs to form the triangle.

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