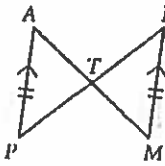


4.2 Name: _____

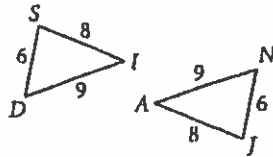
In Exercises 1-3, name the conjecture that leads to each congruence.

MARK THE PICTURES

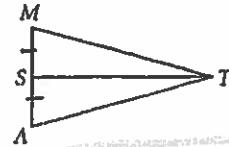
1. $\triangle PAT \cong \triangle IMT$ _____



2. $\triangle SID \cong \triangle JAN$ _____



3. \overline{TS} bisects \overline{MA} , $\overline{MT} \cong \overline{AT}$, and $\triangle MST \cong \triangle AST$

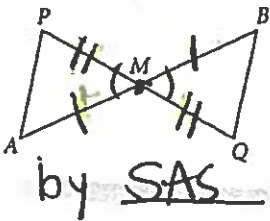


In Exercises 4-9, name a triangle congruent to the given triangle and state the congruence conjecture. If you cannot show any triangles to be congruent from the information given, write "cannot be determined" and redraw the triangles so that they are clearly not congruent.

OPTIONS: SSS, SAS, ASA, AAS, HL or none (AAA, SSA don't work)

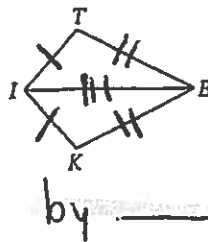
4. M is the midpoint of \overline{AB} and \overline{PQ} .

$\triangle APM \cong \triangle BQM$

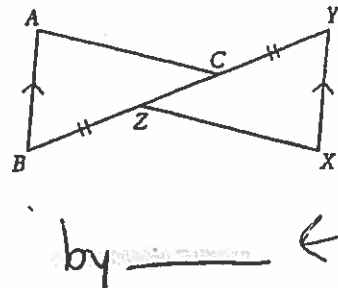


5. KITE is a kite with $KI = TI$.

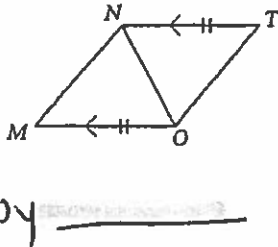
$\triangle KIE \cong \triangle TIE$



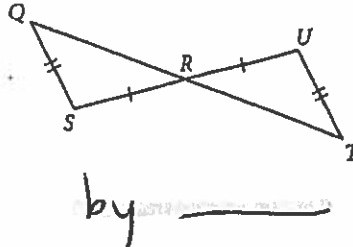
6. $\triangle ABC \cong$ _____



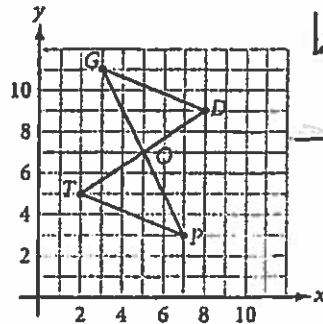
7. $\triangle MON \cong$ _____



8. $\triangle SQR \cong$ _____



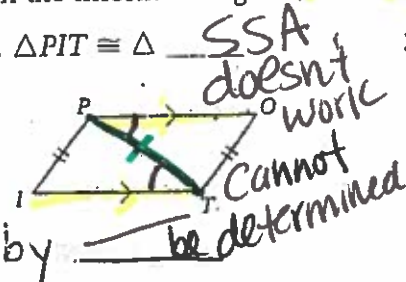
9. $\triangle TOP \cong$ _____



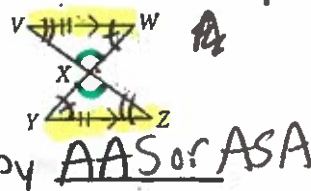
4.3

In Exercises 1-6, name a triangle congruent to the given triangle and state the congruence conjecture. If you cannot show any triangles to be congruent from the information given, write "cannot be determined" and explain why.

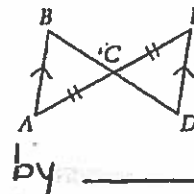
1. $\triangle PIT \cong \triangle$ _____



2. $\triangle XVW \cong \triangle XZY$

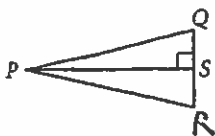


3. $\triangle ECD \cong \triangle$ _____

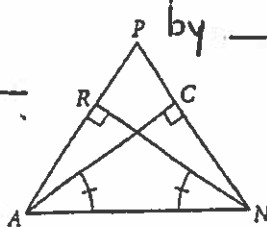


4. \overline{PS} is the angle bisector of $\angle QPR$.

$\triangle PQS \cong \triangle PRS$ by _____

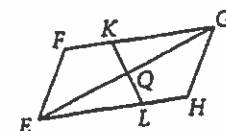


5. $\triangle ACN \cong \triangle$ _____



6. EFGH is a parallelogram. $GQ = EQ$.


$\triangle EQL \cong \triangle$ _____ by _____



Name: _____


Triangles

4.2 Ways To Prove Triangles Congruent



SSS (side, side, side) = three sides of one triangle congruent to the corresponding parts of another triangle $\Rightarrow \cong \Delta s$.

SAS (side, angle, side) = two sides and the included angle of one triangle congruent to the corresponding parts of another triangle $\Rightarrow \cong \Delta s$.



Identify which property will prove these triangles congruent (SSS, SAS or none).

