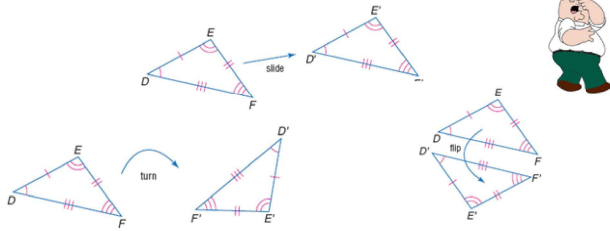
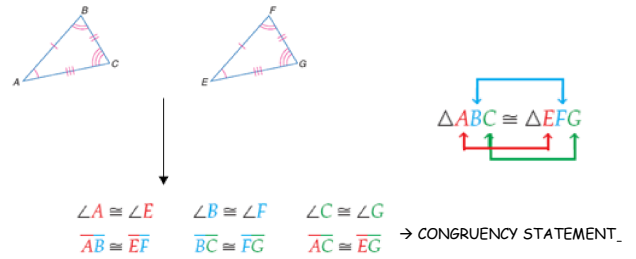


Two figures are congruent if and only if you can move one figure on top of the other so that all of their corresponding parts are congruent.



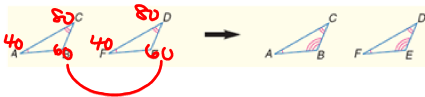
Apr 24-8:08 AM

- 3 pairs of congruent corresponding sides.
- 3 pairs of congruent corresponding angles.



Dec 15-9:49 PM

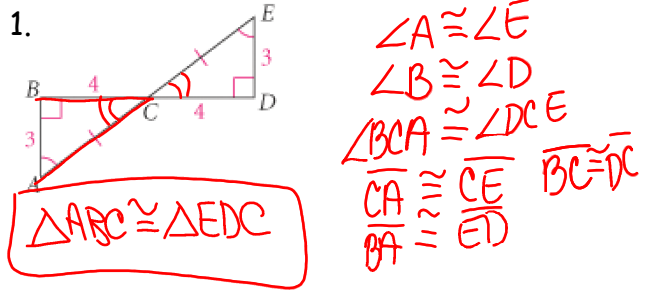
Third Angle Theorem: If two angles of one triangle are congruent to two angles of a second triangle, then the third angle are congruent.



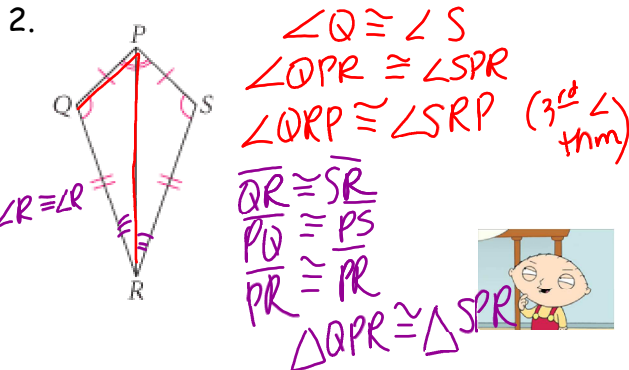
Jan 27-9:18 AM

Example #1:

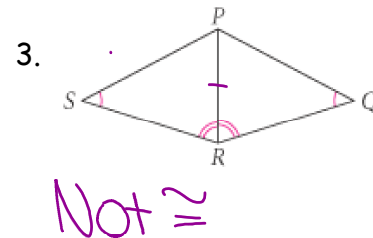
Are the following figures congruent? Why or why not? If yes, write a triangle congruency statement.



Apr 24-8:11 AM



Apr 24-8:11 AM



Apr 24-8:22 AM

4.

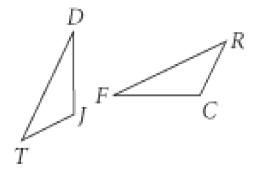
$\overline{JK} \cong \overline{XY} \cong \overline{NM} \cong \overline{LJ}$
 $\overline{WX} \cong \overline{YZ} \cong \overline{LM} \cong \overline{NJ}$
 $\angle W \cong \angle L$
 $\angle X \cong \angle M$
 $\angle Y \cong \angle N$
 $\angle Z \cong \angle J$
 $\overline{WXYZ} \cong \overline{LMNJ}$

Jan 27-9:20 AM

Example #2:
 $\triangle TJD \cong \triangle RCF$ List the congruent corresponding parts.

Sides:
 $\overline{TJ} \cong \overline{RC}$
 $\overline{JD} \cong \overline{CF}$
 $\overline{TD} \cong \overline{RF}$

Angles:
 $\angle T \cong \angle R$
 $\angle J \cong \angle C$
 $\angle D \cong \angle F$



Apr 24-8:12 AM

Example #3:
 $\triangle ASM \cong \triangle ERN$. Solve for x & y.

$16x = 112$
 $x = 7$
 $41 = 3x + 5y$
 $41 = 3(7) + 5y$
 $41 = 21 + 5y$
 $20 = 5y$
 $4 = y$

Jan 14-2:18 PM

Example #4:
 $\triangle DEF \cong \triangle SPQR$. Solve for x and y.

$6y + x = 68$
 $6y + 8 = 68$
 $6y = 60$
 $y = 10$

$2x - 4 = 12$
 $2x = 16$
 $x = 8$

Apr 17-9:11 AM

Apr 17-9:11 AM