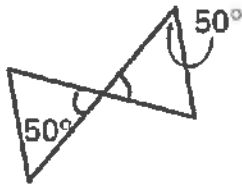


G-SRT.3. Learning Target: I can establish the AA criterion by looking at multiple examples using similarity transformation of triangles.

6. Given each of the diagrams below, explain how the two triangles shown are similar by AA~.

(a)



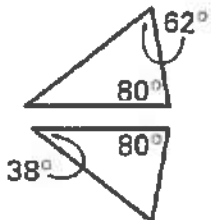
Vertical angles are Congruent
 Now 2 PAIR of CORRESPONDING \angle 's
 CONGRUENT.

(b)



$\angle 1 \cong \angle 2$ BECAUSE THEY ARE CORRESPONDING
 $\angle 3 \cong \angle 4$ ANGLES (2 PARALLEL LINES
CUT BY A TRANSVERSAL)
 THERE ARE 2 PAIR OF CORRESPONDING
 ANGLES WHICH ARE CONGRUENT.

(c)

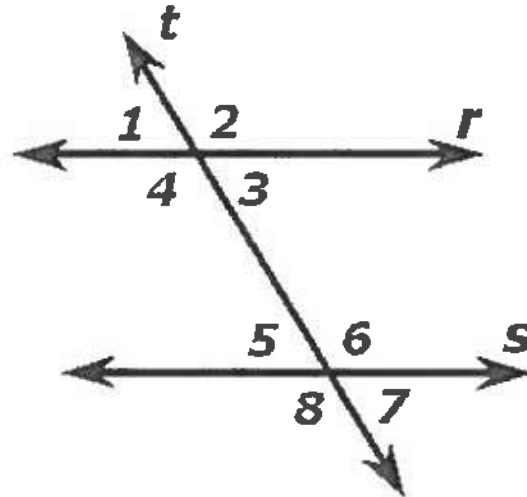


THE THIRD \angle IN THE TOP TRIANGLE
IS 38° , THE THIRD \angle IN THE BOTTOM
TRIANGLE IS 62° . NOW THERE ARE 2 PAIR
OF CORRESPONDING ANGLES CONGRUENT.

Bonus Review to help you be successful...

#1 - Given that line r is parallel to line s, identify a pair of each of the following:

- alternate interior angles $\angle 3 \cong \angle 5$, $\angle 4 \cong \angle 6$
- alternate exterior angles $\angle 1 \cong \angle 7$, $\angle 2 \cong \angle 8$
- corresponding angles $\angle 1 \cong \angle 5$, $\angle 2 \cong \angle 6$, $\angle 4 \cong \angle 8$, $\angle 3 \cong \angle 7$
- vertical angles $\angle 1 \cong \angle 3$, $\angle 2 \cong \angle 4$, $\angle 5 \cong \angle 7$, $\angle 6 \cong \angle 8$



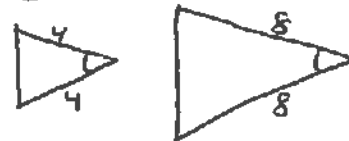
#2 - The angles of a triangle all add to equal 180° .

#3 - Draw a picture (with numbers) to correctly illustrate each of the following:

SSS~



SAS~



AA~

