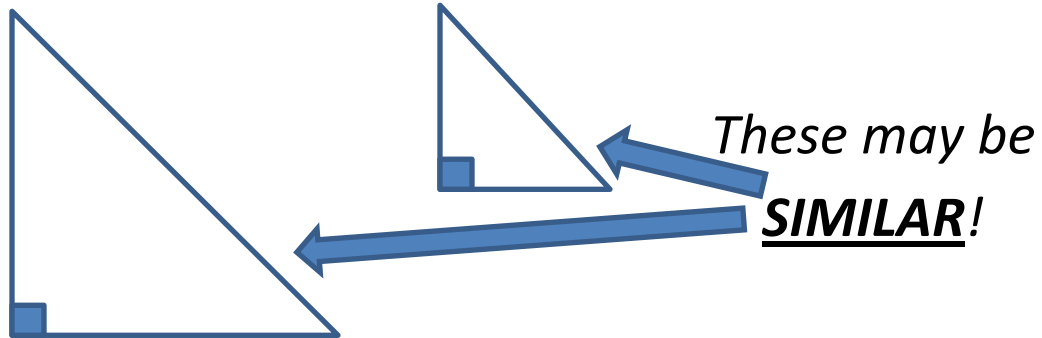


REVIEW: Similar Figures

Figures may be SIMILAR if....they are the
SAME SHAPE but DIFFERENT SIZES



How do we know for sure if figures are SIMILAR?



★ How to determine if figures are SIMILAR

For TRIANGLES



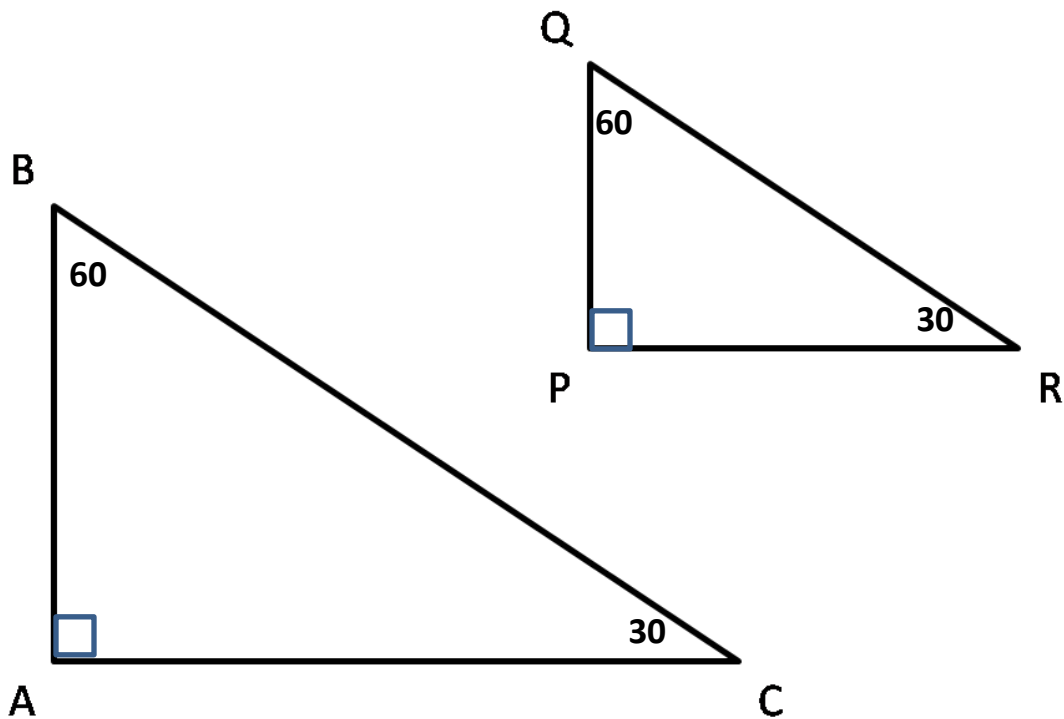
You ONLY have to PROVE that the ANGLES are EQUAL

For RECTANGLES



You have to PROVE that the ANGLES and SIDES are EQUAL

★ Setting up a PROPORTION to PROVE these TRIANGLES are SIMILAR



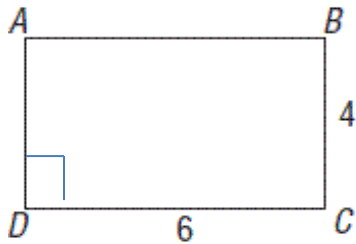
EACH ANGLE of these triangles is **EQUAL to an ANGLE in the other!**

angle ABC = angle PQR \longrightarrow **they BOTH measure 60**

angle ACB = angle PRQ \longrightarrow **they BOTH measure 30**

angle BAC = angle QPR \longrightarrow **they BOTH measure 90**

★ Setting up a PROPORTION to PROVE these RECTANGLES are SIMILAR



Check the ANGLES first:

✓ Each ANGLE in each of these RECTANGLES is 90 degrees

Check the SIDES next:

Set-up a fraction for the SIDES of the small rectangle.

Set-up a fraction for the SIDES of the large rectangle.

$$\frac{4}{6} = \frac{8}{12}$$

REDUCE each FRACTION.....if they end up to be the SAME, then the rectangles are SIMILAR!

$$\frac{2}{3} = \frac{2}{3}$$

