Write

In your own words, explain the Angle-Angle (AA) Similarity Theorem.

Remember

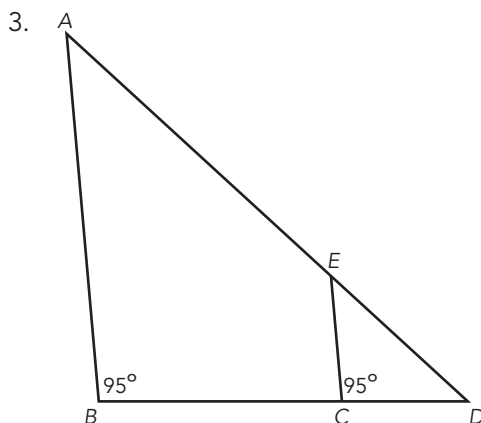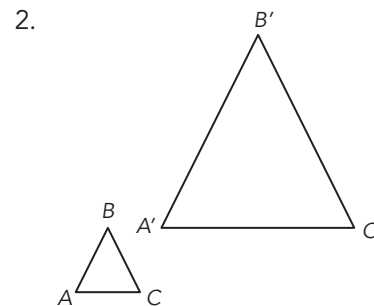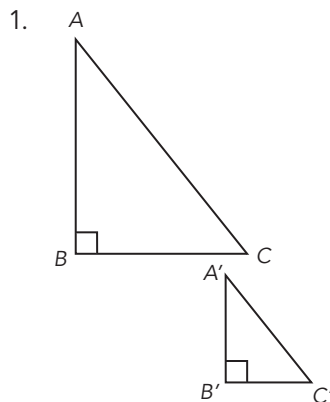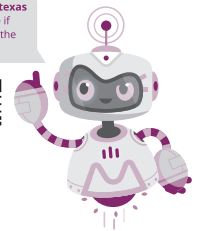You can use dilations and other transformations, line and angle relationships, measurements, and/or the Angle-Angle Similarity Theorem to demonstrate that two triangles are similar.

Practice

Use the AA Similarity Theorem and a protractor, if necessary, to demonstrate how the triangles in each pair are similar. Show your work.
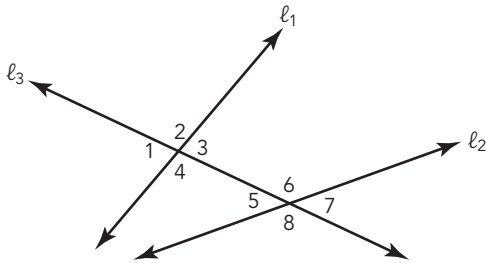
1.

2.

3.

4.
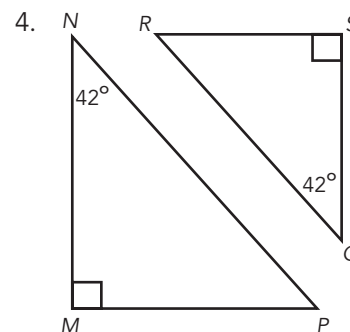
Stretch

Vicki says that any two right triangles with two congruent angles are similar. Patrick says that the triangles are similar and congruent. Who is correct? Explain how you know.

Review

1. In the figure shown, lines ℓ_1 and ℓ_2 are intersected by transversal ℓ_3. Name the corresponding angles.

2. Sketch an example of alternate interior angles.

3. A photo has a width of 250 pixels and a height of 320 pixels. Determine the new dimensions and tell whether the enlarged or reduced photo is similar.
   a. Width: 150%, height: 200%
   b. Width: 75%, height: 75%

4. Solve each equation.
   a. $3(x + 3) = -6$
   b. $-20 = -2(4 - x)$