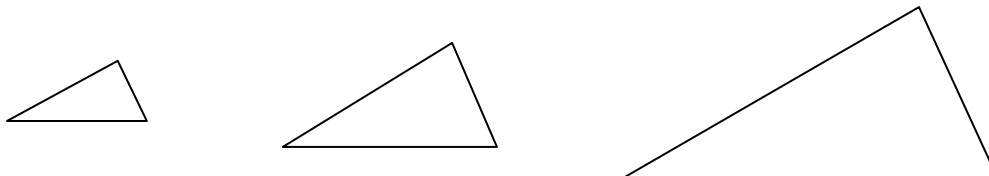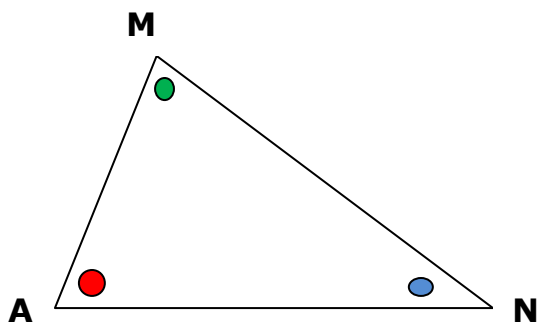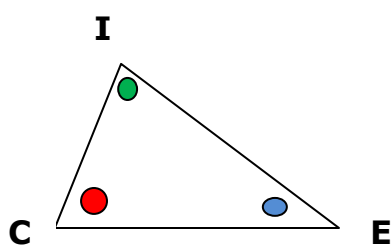# C3 - Similar Figures - Triangles

Investigate: Look at the three triangles below. What do you notice about their shape, their angles, and their side lengths?

Definitions:

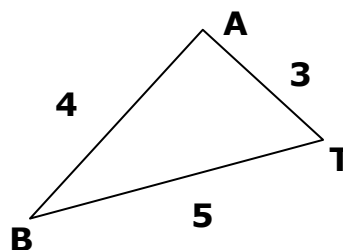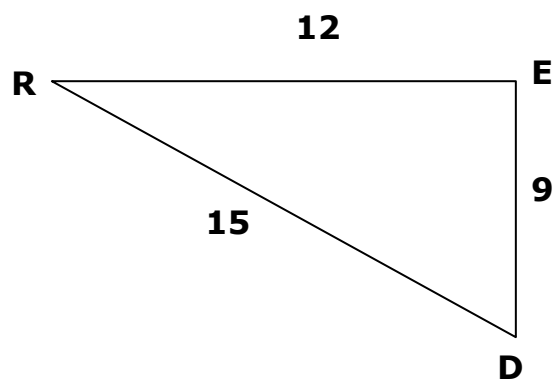- Corresponding Angles and Corresponding Sides: _____

_____

_____

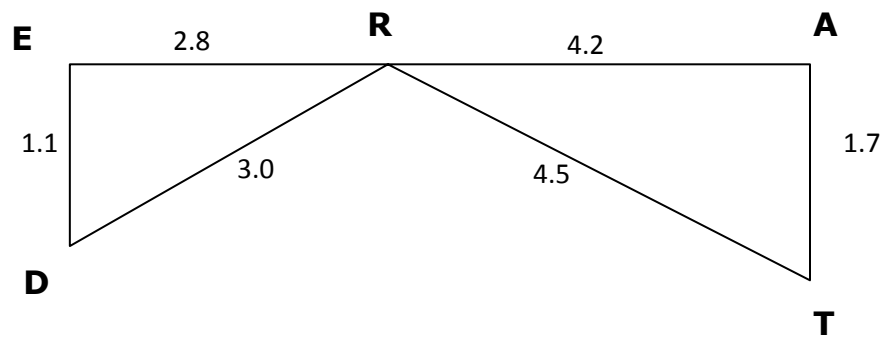| Corresponding Angles	Corresponding Sides

- Similar (figures): _____

_____

_____

 When you're trying to determine whether or not two triangles are similar, you need to confirm either all three angles, or all three side-ratios.
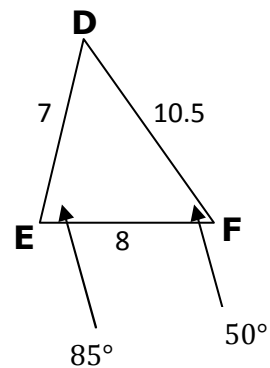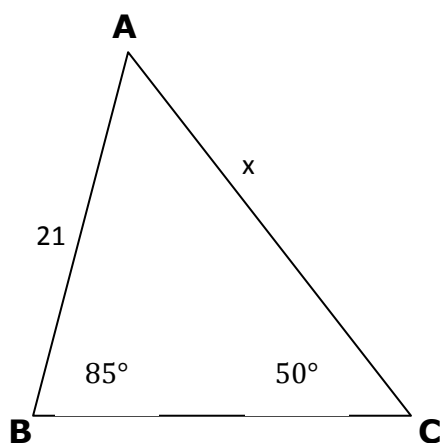
Example #1: Determine if ΔRED is similar to ΔBAT.

Example #2: Determine if ΔRED is similar to ΔRAT.

E   2.8   R   4.2   A

1.1   1.7

        3.0   4.5

D

T

Example #3: Use similar triangles to determine a missing side length.

Jeff is drawing triangles for a math puzzle. Use your knowledge of similar triangles to determine:

a) If the triangles are similar
b) The missing side length

Example #4: Find the missing side length.