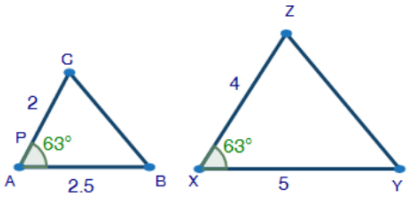
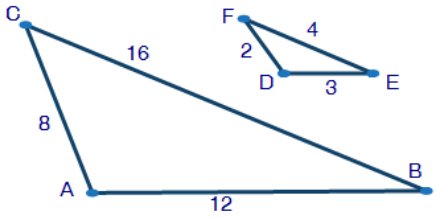
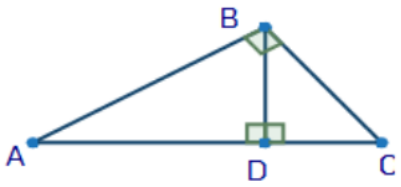
3.05 Triangle Congruence & Similarity

Triangle Similarity Postulates

Side-Angle-Side Similarity Postulate Video CLICK HERE	**Side-Side-Side Similarity Postulate** Video CLICK HERE
If two or more triangles have corresponding, _____ angles, and the sides that make up these angles are _____, then the triangles are similar.	If all corresponding _____ of two or more triangles form the same _____, then the triangles are similar.
Example: 	Example: 

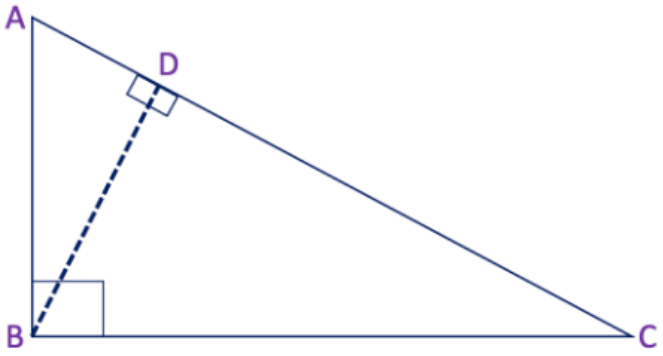
Right Triangle Similarity Theorem

Pieces of Right Triangle Similarity Theorem Video CLICK HERE	
If an altitude is drawn from the _____ angle of a right triangle, the two smaller triangles created are _____ to one another and to the larger triangle.	
	

Similar Right Triangles "Numbers" Method Video CLICK HERE

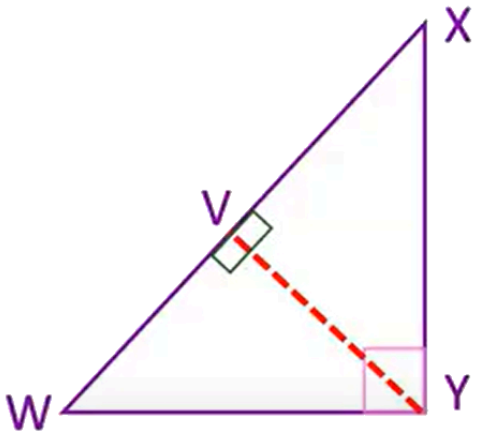
Label the triangles that are similar:

ΔABC ~ Δ_____~ Δ_____

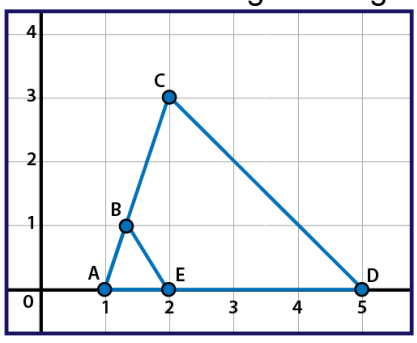
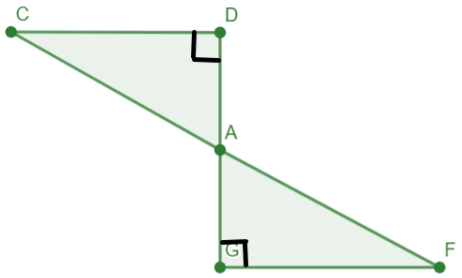


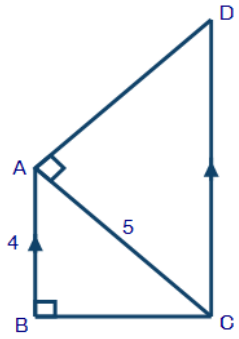
Practice: Identify the Similar Right Triangles

Δ_____ ~ Δ_____~ Δ_____



Practice

Question 1 Video CLICK HERE	**Question 2** Video CLICK HERE
Katie is creating a smaller scaled replica of a triangular picture. Set up an equation to determine the length of segment AE. 	The following triangles are in a ratio of 1:1. If AG=2x-18 and DA=x+6, what is the length from D to G? 

Question 3 Video CLICK HERE	**Question 4** Video CLICK HERE
Determine if the two triangles are similar and then solve for side CD.  	Which triangle(s) is similar to triangle RST using the Pieces of Right Triangles Similarity Theorem? ☐ STV ☐ VTS ☐ RVS ☐ SRV ☐ SVT