Name (print first and last) _____ **Per_____ Date:_ 3/10 due 3/11**

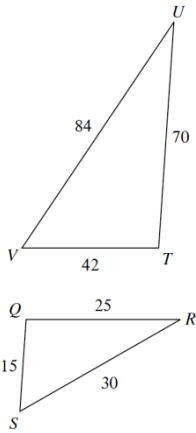**7.7 Similarity: Proving Similar Triangles**   **Geometry Regents 2013-2014 Ms. Lomac**

SLO: I can prove that a pair of triangles are congruent by SSS~, SAS~, or AA~.

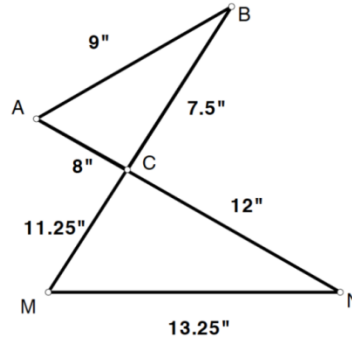|				
Dilation (Notation D$_k$)	Segment	Length	Similar	Image
Coordinates	Direction	Congruent	Units	Original
Scale factor	Center of dilation	Origin	Proportional	Corresponding

(1) ☐ Use activity 7.5 to help you prove that the triangles in each pair are similar, OR describe why they cannot be proven similar.
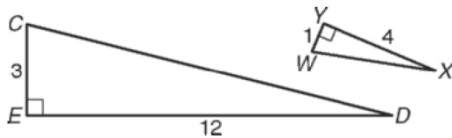
☐ (a)

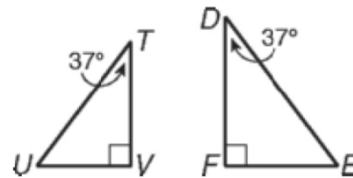I know that . . . | because . . .

☐ (b)

I know that . . . | because . . .
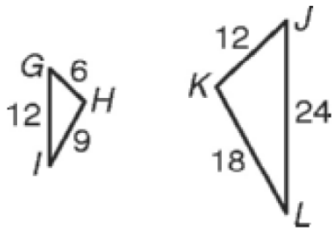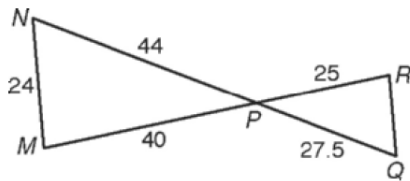
☐ (c)

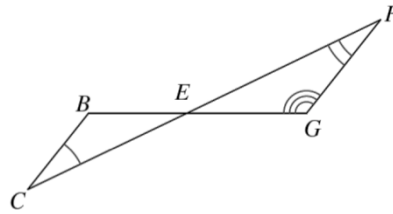

☐ (d)

7.7

(e)

(f)

(g)

(h)

(2) ☐ For the problem below, draw a picture and then write a proof.

5. In $\triangle PQR$, $PQ=8$, $QR=10$, and $RP=9$. In $\triangle TUS$, $US=16$, $ST=20$, and $TU=9$. State whether the triangles are similar, and if so, write a similarity statement.