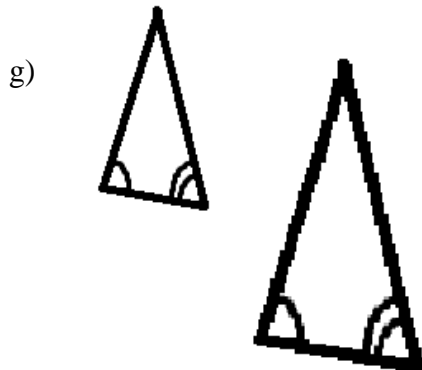
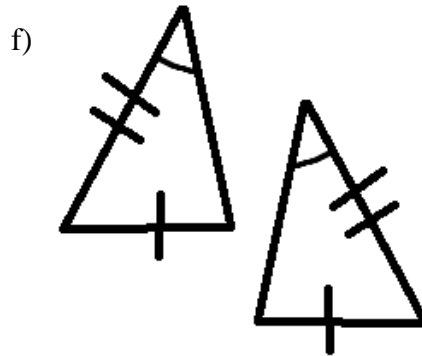
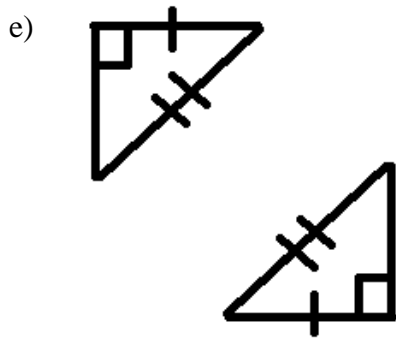
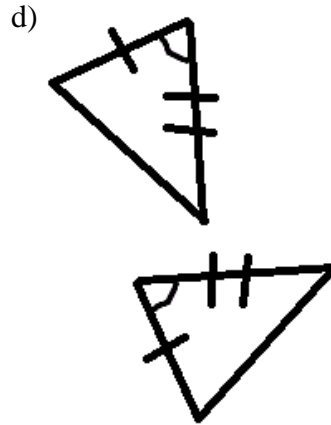
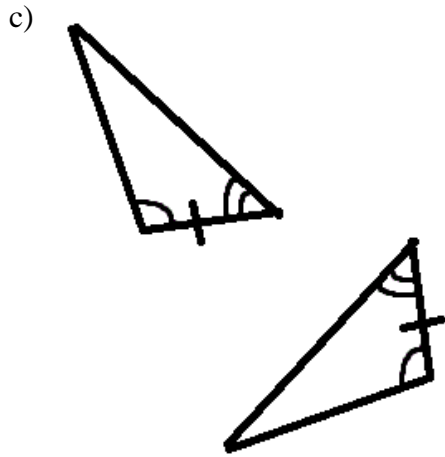
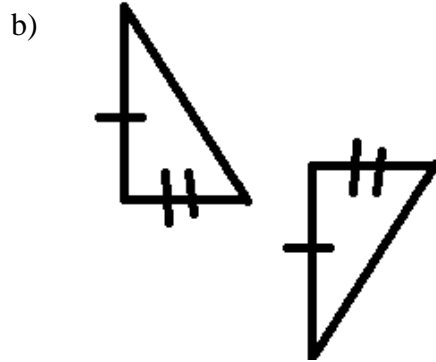


Name: _____
 Date: _____
 Class: _____

Geometry
 Unit 4
 HW 4-1

Which pair of triangles are congruent or similar and how do you know?



2) If a triangle has 2 angles that are 42° and 68° while another triangle has 2 angles that are 42° and 70° are these 2 triangles similar? Why or why not?

3) If a triangle has 2 angles that are 35° and 100° while another triangle has 2 angles that are 55° and 100° are these 2 triangles similar? Why or why not?

4) Two triangles are drawn so that $\triangle ABC \cong \triangle DEF$. If $AB = x^2 - x + 5$, $DE = 2x + 9$, and $AC = 3x + 7$ find DF.

5) Two triangles are drawn so that $\triangle ABC \cong \triangle DEF$. $m\angle A = 8x - 14$, $m\angle B = 10x - 18$, and $m\angle F = 4x + 1$. Find $m\angle E$.

6) Two triangles are drawn so that $\triangle ABC \cong \triangle DEF$. If the area of triangle DEF is 55ft, $AB = 4x$, $BC = 5x + 3$, and $DF = 10x - 5$, which is the smallest angle of triangle ABC?