MATH 1040 - Coreq to MATH 1151 - Week 7 MOLS

1. Determine if the two triangles given are congruent.

   (a) Triangle 1: Vertices: (4, 0), (0, 9), (4, 9)
   Triangle 2: Vertices: (0, 0), (0, 9), (4, 9)

   Congruent

   (b) Triangle 1: Vertices: (-3, 8), (0, 2), (-2, 0)
   Triangle 2: Vertices: (3, 8), (0, 2), (2, 0)

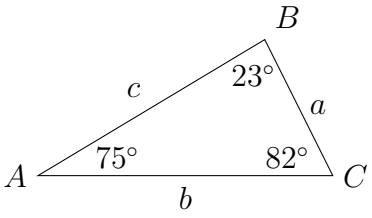
   Congruent

   (c) Triangle 1: $A = 90°$, $B = 45°$, $C = 45°$, $a = 6\sqrt{2}$, $b = 6$, $c = 6$
   Triangle 2: $A = 45°$, $B = 45°$, $C = 90°$, $a = 4$, $b = 4$, $c = 4\sqrt{2}$

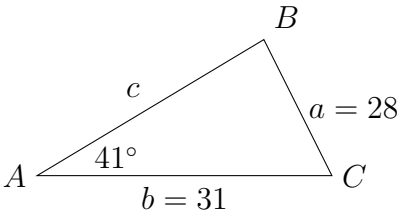
   Not congruent

2. In some cases, three measurements is enough to determine if two triangles are congruent. We will figure out which combinations of measurements can determine congruence in the 1151 Solving Triangles activity. Identify each triangle's type (SSS, SAS, ASA, AAS, SSA, AAA), where A's and S's denote the angles and sides given.

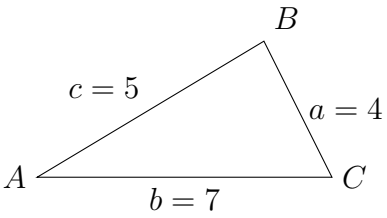
a)



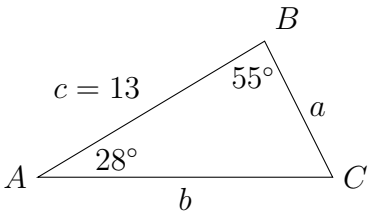
b)



c)



d)



(a) AAA

(b) SSA

(c) SSS

(d) ASA