Name:

Date:

School:

Facilitator:

6.05 Proving Triangles Congruent Part 1

# Total Points: 44

**List the included angle between the given sides.**

****

**1**. ∠

**2**. ∠

Is there enough information to prove the triangles congruent (yes or no). If yes, list SSS or SAS as the method used to prove them congruent. Fill in the congruent parts and the congruence statement. Then identify the rigid transformation: Reflection, Rotation, or Translation.



**3**. Are the triangles congruent?

Method used:

Identify the congruent parts.

      ≅

      ≅

           ≅

∆      ≅ ∆      by       Postulate

Transformation:



**4**. Are the triangles congruent?

Method used:

Identify the congruent parts.

      ≅

      ≅

           ≅

∆      ≅ ∆      by       Postulate

Transformation:

 ****

**5**. Identify the transformation:

**6**. Verify that these triangles are congruent using the distance formula. You will need to prove that all three sides are congruent.

a. Identify the first congruent pair.

 ≅

length of =

length of       =

**Show work below.**

b. Identify the second congruent pair.

 ≅

length of =

length of       =

**Show work below.**

c. Identify the third congruent pair.

 ≅

length of =

length of       =

**Show work below.**

d. Complete the congruence statement. ∆ABC ≅ ∆      by       Postulate