**Geometry** (G.CO.6-8)Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
**Unit 1B –Rigid Motion & Congruence Review (HW6)** Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_

Use the definition of congruence in terms of rigid motions to determine whether the two figures are congruent (circle your answer), explain your answer in terms of specific rigid motion(s), and write a congruence statement.

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| 1.  Congruent Not Congruent (Pre-image shaded)  Rigid Motion(s): T<5,3>    Congruence Statement: JMLK PSRQ | |
| 2.  Congruent Not Congruent  Explanation: Ro,90°CW ○ T<0, -1>  Congruence Statement: ∆KHJ ∆GDF | |
| 3. Given that , PQ = 2.7 ft, PR = 3.4 ft, and , what other sides and/or angles do you know the measure of? What are the measures of those sides/angles?  PQ = ST so ST = 2.7ft m<T = m<Q so m<Q = 35°  PR = SU so SU = 3.4 ft | |
| 4. Given that , , , and m, find  m<W = m<R m<S = m<F (but we don’t know m<F)  3x + 14 = 7x – 34 m<S + m<E + m<W = 180°  48 = 4x m<S + 50 + 50 = 180°  X = 12 m<s = 80° | |
| 5. Given DEF MNP. Complete the following statements.        a) ∠F ∠ \_P\_\_\_ b) NP \_ EF\_\_\_ c) m∠M ∠ \_\_ D\_\_ d)  \_\_ PM\_ | |
| 6. Given , write as many statements about congruent corresponding parts as possible.  <W <L, <X <M, <Y <N, WX LM, XY MN, WY LN | |
| 7. Given: bisects and    CONGRUENT NOT CONGRUENT  Shortcut: \_\_\_ ASA \_\_\_\_\_\_\_\_\_\_\_      Additional Reason(s):  Angle bisector, Reflexive property | |
| 8. Given: M is the midpoint of and is isosceles with base    CONGRUENT NOT CONGRUENT  Shortcut: \_\_\_\_ SSS or SAS\_\_\_\_      Additional Reason(s):  Isosc. ∆ def and thm (for sides and/or angles)  Midpoint def, reflexive prop (if SSS) | |
| 9.    CONGRUENT NOT CONGRUENT  Shortcut: \_\_ None\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_      Additional Reason(s):  Reflexive property | |
| 10. Suppose that .  100°  80°  50°  50°  10  Z  6  V  8  50⁰  30⁰  X  W  Y  9   * 1. d.   6   * 1. e. VZ = 10   8  30°   * 1. VY = 14 | |
| 1. CONGRUENT NOT CONGRUENT     Shortcut: \_\_ None \_\_\_\_\_\_\_      Additional Reason(s):    Vertical angles thm. |  | |
| 1. CONGRUENT NOT CONGRUENT   Shortcut: \_ SSS \_\_\_\_\_\_\_\_      Additional Reason(s):  Reflexive property   \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  | |
| 13. Given: B is the midpoint of , ,  CONGRUENT NOT CONGRUENT    Shortcut: AAS \_\_\_\_\_\_\_\_\_\_      Additional Reason(s):  Midpoint definition |  | |
| 14. Given: , ,  CONGRUENT NOT CONGRUENT  Shortcut: AAS \_\_\_\_\_\_\_\_\_      \*  Additional Reason(s):  \*  Overlapping seg. thm. |  | |