**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_ Score:\_\_\_\_\_**

**U2 HWK # 2** *Parallel Lines and Transversals*

**Directions:** Use the diagram below to answer questions #1 and 2 given that . Mark the lines parallel.

1. For each of the following pairs of angles, describe the relationship between the two angles.

and b. and c. and d. and

1. Using the figure above determine the measures of the remaining angles in the diagram. One angle measure is given. Show your work and justify how you know.
2. b) c)

d) e) f)

g)

1. ****One angle measure is given in the diagram. Determine the measures of the remaining angles in the diagram. Line j and line k are parallel. Show your work.

1. b)

c) d)

e) f)

|  |  |
| --- | --- |
| 1. Given line *v* line *w*, solve for *x.* | 1. Given line line *q*, solve for *x.* |
| 1. Determine whether lines *s* and *t* are parallel. Provide a justification for your response. | 1. Determine whether lines *p* and *q* are parallel. Provide a justification for your response. |
| 1. Given: line line *w*.    1. Which angle(s) are congruent to ?    2. Which angle(s) are congruent to ?    3. Name **three** pairs of supplementary angles. | 1. What value of *x* will make line *j* parallel to line *k*? |