**Secondary Math 2 3.4 Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Similarity of Right Triangles (Geometric Mean)**

**Conceptual Understanding:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Solve for y: |  | Solve for x: |

**Review Problems:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Determine if the following triangles are similar. If so write a similarity statement. |  |  |
|  | Draw the dilated image of the given figureCenter $(0, 0)$; scale factor $\frac{1}{2}$ |  | Find $m∠A$ and $m∠B$. |

**Extended Understanding:**

1. A bridge is needed to cross over a canyon. The dotted line segment connecting points *S* and *R* represents the bridge. The distance from point *P* to point *S* is 45 **yards**. The distance from point *Q* to point *S* is 130 **feet**. How long is the bridge? (Hint: Need to change yards into feet first)



1. Solve for x, y, and z:

