**WA 10 – 6.2 Assignment** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. The scale on a map is 2.5 cm:500 m.

1. What distance is represented by a 12.5-cm segment on the map?
2. How long would a segment on the map be if it represented 1.5 km?

2. Show whether a rectangular prism that is *6 m x 10 m x 8 m* is similar to one that is *4 m x 7 m x 5 m*.

3. Colin states that the following two figures are similar, but Tai disagrees, saying that they don’t have enough information. Who is right? Explain and show any calculations needed.



4. While he was at the pet food store, Jeremy saw three different rectangular sized dog mats. They measured 36 inches by 28 inches, 27 inches by 21 inches, and 24 inches by 18 inches. Are all the mats similar? Show your calculations.

5. Using two similar rectangles show whether their areas are in the same proportion as the sides.

6. Pierre drew two regular hexagons (6-sided figures with all sides equal in length). Are the two hexagons similar? Why or why not? Explain and include a diagram.