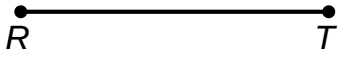
Geometry R – Mr. Bo
Unit 1 – Day 4 HW

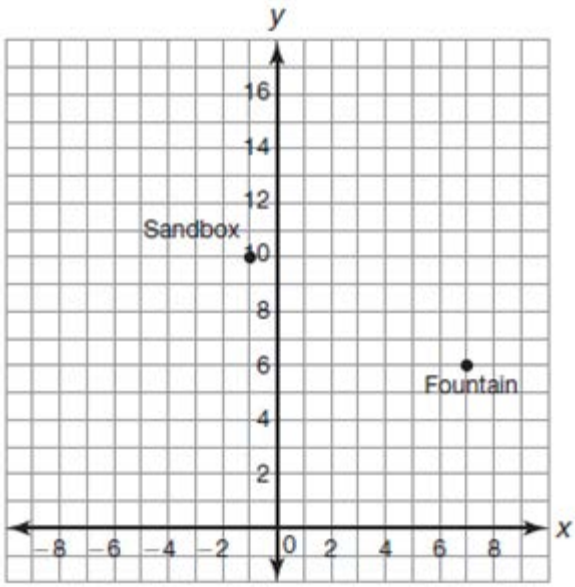
Name_____
Date_____

**Constructions:**

1. Construct the perpendicular bisector of segment RT and label the midpoint M. Write an **equality** statement based on your construction.




2. The grid shows the location of a sandbox and a fountain in a park.




a. Find, to the nearest tenth, the **distance** between the sandbox and fountain. *Remember to show how you got your answer*.

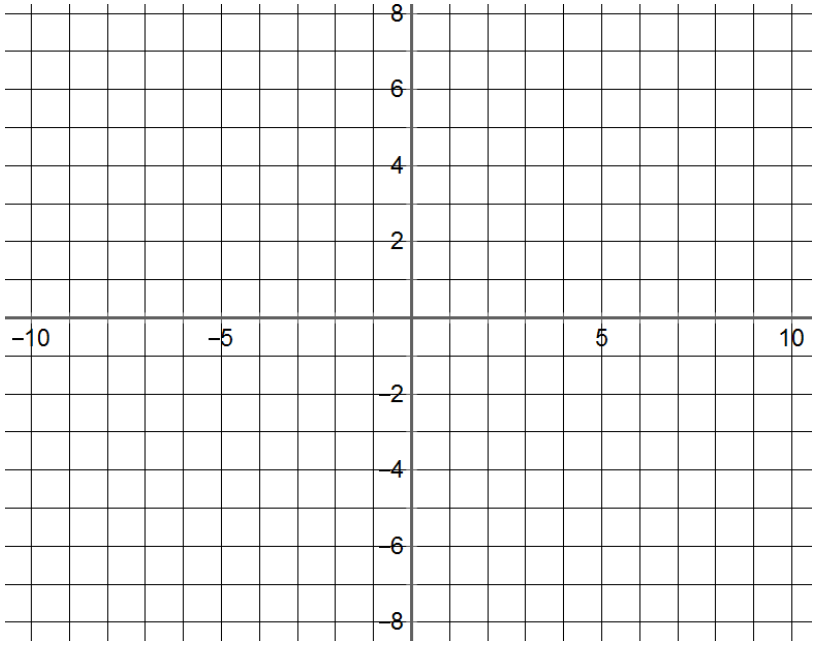
b. You are going to meet your friend at a point half way between the sandbox and fountain. Locate this point on the grid and state the coordinates.

c. You dropped your keys 1/4 of the way from the sandbox. Locate this point on the grid and state the coordinates.

3. Find the midpoint between each pair of points. *Use of the grid is optional.*

a. G(-1, 0) and H(5, 8)

b. P(5, -4) and Q(3,-1)




4a. Line segment CD has endpoint C(5,6) and midpoint M(11,16). Find the coordinates of endpoint D.

b. If segment CD is translated 3 units to the left to form segment C'D', what are the coordinates of the midpoint of segment C'D'? Explain your reasoning.

5. Construct the bisector of angle A of triangle ABC. Write a **congruency** statement based on the angles formed.