

Name: _____

Hour: _____

Distance and Midpoint Homework #1

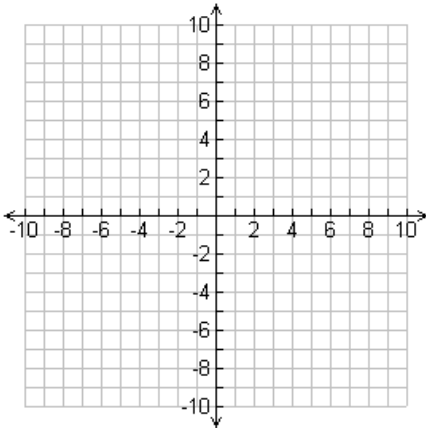
Directions: Use the Pythagorean Theorem or Distance Formula to find the distance of each segment, and then find the midpoint of each segment. **You must simplify radicals and fractions – no decimals!!!!**

1. G(2,6), H(-1,4)

Distance: _____

Midpoint: _____

Slope: _____

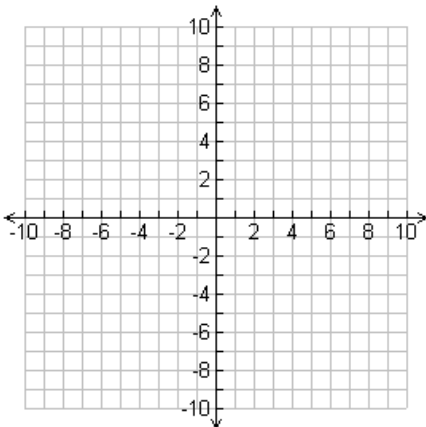


2. J(7,10), K(-4,5)

Distance: _____

Midpoint: _____

Slope: _____

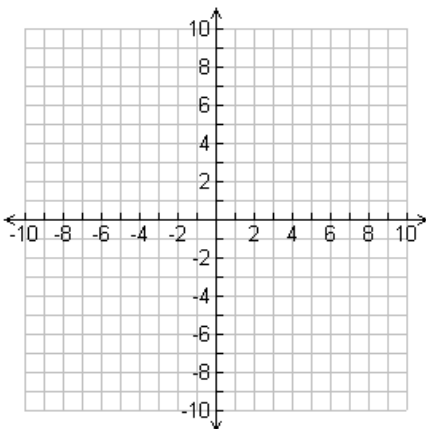


3. D(0,2), E(4,5)

Distance: _____

Midpoint: _____

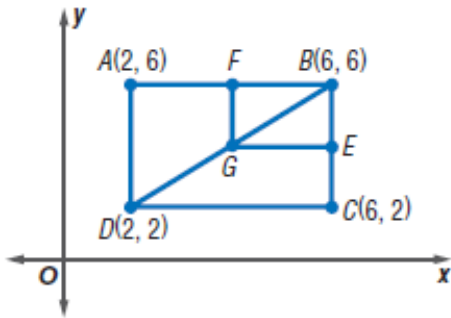
Slope: _____



Directions: M is the midpoint of \overline{XY} . Find the missing endpoint's coordinates based on the given information.

4. M(2,3), X(-1,5) Find Y(x,y)

5. M(3,1), Y(-4,7) Find X(x,y).



Use figure to the left for 6-8.

In this figure, \overline{GE} bisects \overline{BC} and \overline{GF} bisects \overline{AB} . $\overline{FG} \perp \overline{GE}$.

6. Find the coordinates of F, E and G.

F: _____

E: _____

G: _____

7. Find the following lengths by calculating the distance between each endpoint.

AB=_____ BE=_____

BC=_____ BF=_____

CD=_____ BG=_____

BD=_____ DG=_____

8. Name conclusions or relationships that you can conclude based on the information you found in #6 and 7. It must be based on what YOU found, NOT what was given to you.