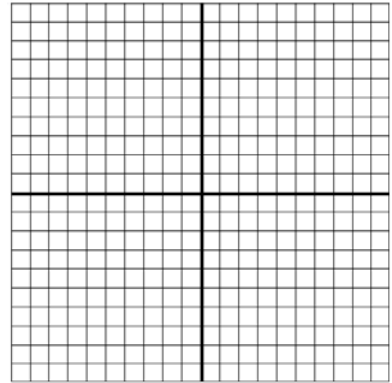


Graphing Special Lines

Activity 1: On the graph provided, graph each of the pairs of points and draw a line through the pair of points. It is not always necessary to show all four quadrants. Check out the ordered pairs to see which quadrants you will need to use.



Find the slope of each line in the given space.

A(-3,2) B(-2,3) Slope of \overline{AB} _____

C(-0,-4) D(1,1) Slope of \overline{CD} _____

What appears to be special about \overline{AB} and \overline{CD} ?

E(3,4) F(1, 1) Slope of \overline{EF} _____

G(2,3) H(0,0) Slope of \overline{GH} _____

What appears to be special about \overline{EF} and \overline{GH} ?

Why does this appear to be true?

Now it's your opportunity to see if you can graph two lines which also are parallel.

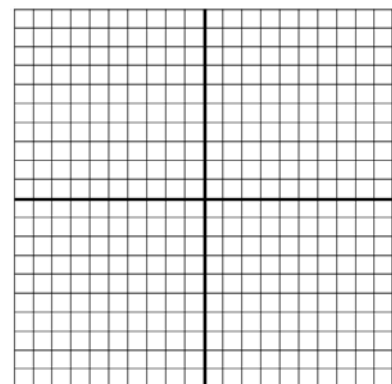
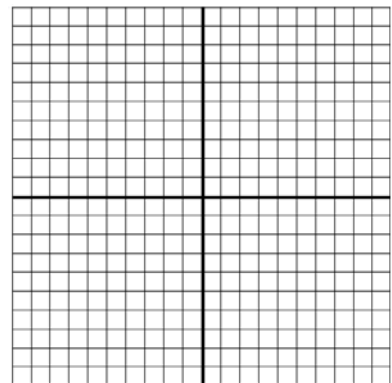
Using the graph at the right:

Graph a \overline{IJ} passing through I(2,3) and J(-3,5).

Graph a \overline{KL} passing through K(-3,-2) which parallel to line IJ.

Name the coordinates for L _____

If two lines are parallel then _____



Activity 2: On the graph provided, graph each of the pairs of points and draw a line through the pair of points. It is not always necessary to show all four quadrants. Check out the ordered pairs to see which quadrants you will need to use.

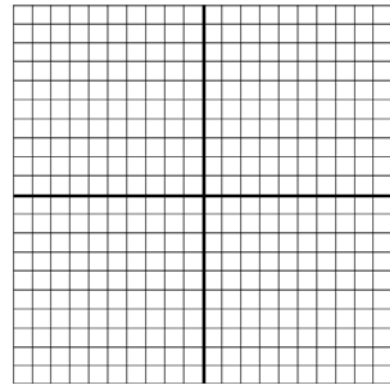
Find the slope of each line in the given space.

A(2,3) B(4,8) Slope of \overline{AB} _____

C(-2,7) D(3,5) Slope of \overline{CD} _____

What appears to be special about lines \overleftrightarrow{AB} and \overleftrightarrow{CD} ?

Check it with your protractor.

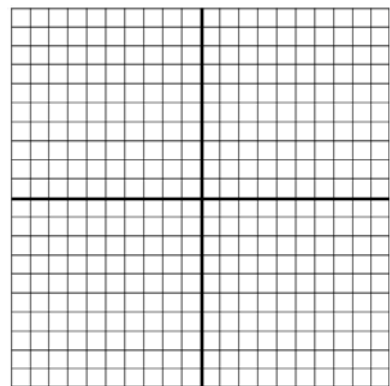


E(-3,-4) F(0, -9) Slope of \overline{EF} _____

G(4,4) H(9,7) Slope of \overline{GH} _____

What appears to be special about the lines \overleftrightarrow{EF} and \overleftrightarrow{GH} ?

Check it with your protractor.



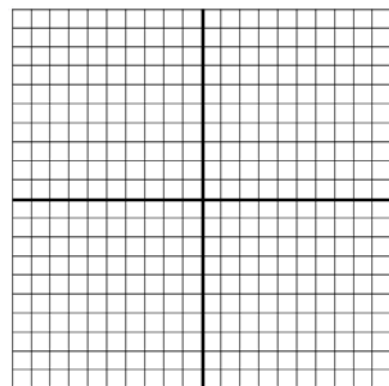
Now it's your opportunity to see if you can graph two lines which also are perpendicular.

Using the graph at the right:

Graph a \overline{IJ} passing through I(2,3) and J(-3,5).

Graph a \overline{KL} passing through K(-3,-2) which is perpendicular to line IJ.

Name the ordered pair for L _____



If two lines are perpendicular then _____