# ⓈⓁⓄⓅⒺ ⓂⒾⒹⓅⓄⒾⓃⓉ ⒶⓝⒹ ⒹⒾⓈⓉⒶⓃⒸⒺ

In your ⌂ screen, open My Documents, and open the Examples folder. The file is called "    " .

On page (tab) 1.2, you will see four formulas that will be used in this exercise. Rewrite the formulas here as you know them:

Given two ordered pairs $(x_1, y_1)$ and $(x_2, y_2)$

Midpoint =


Slope =


Distance =

Use the "claw" to grab one endpoint of the line segment. Drag it so that the segment forms a horizontal line segment. Record the ordered pairs here:
        ( ____ , ____ )   and   (____, ____ )

Now, record the midpoint: (____, ____ )


Slope:


Distance:


Why is the distance a positive integer?

Use the "claw" to make the line segment be vertical. Record the ordered pairs here:
( ____ , ____ )   and   (____, ____ )

Now, record the midpoint:


Slope:


Distance:


Why is the slope "undefined"?

Use the claw to make the line segment have a positive slope. Record the ordered pairs here:
( ___ , ___ )  and  (___, ___ )


What is the fraction for the decimal that the calculator produced?  (hint: figure out the slope yourself!)

Use the claw to make the line segment have a negative slope. . Record the ordered pairs here:
( ___ , ___ )  and  (___, ___ )

What is the fraction for the decimal that the calculator produced?  (hint: figure out the slope yourself!)


This time, drag the endpoints so that they are at (-2,-2) and (6,2).  What is the distance that is reported to you by the calculator?


Figure it out yourself, by hand.  Leave your answer as a radical.



Drag the two endpoints to a location that has the origin, (0,0) as its midpoint.
Record the endpoints here: ( ___ , ___ )  and  (___, ___ )
 What do you notice about the two endpoints?


Drag to a different location and test your theory. ( ___ , ___ )  and  (___, ___ )

Were you correct?