

Exploring Coordinate Geometry Teacher

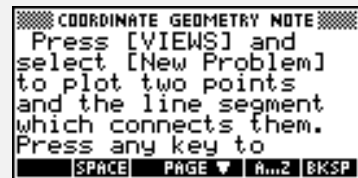
For the

Objectives:

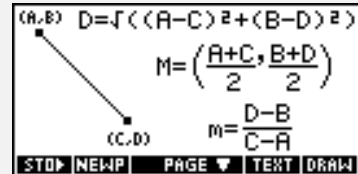
Using the **COORDINATE GEOMETRY** applet, the student will find the midpoint, distance, and slope of a given line segment.

Functionality:

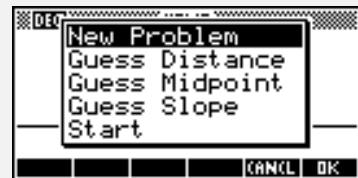
When the student presses **START**, the **COORDINATE GEOMETRY NOTE** will be displayed.



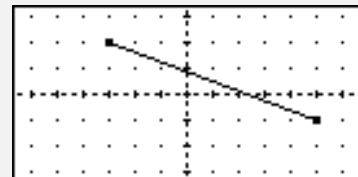
After reading the note, the student should press **SKETCH** for further explanation.



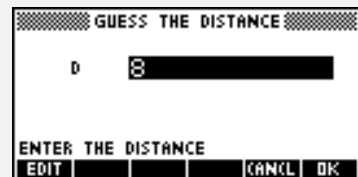
VIEWS allows the student to select a new problem and enter the distance, midpoint, or slope of the new line segment.



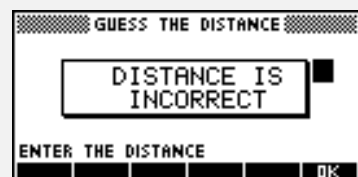
New Problem will randomly generate a line segment.



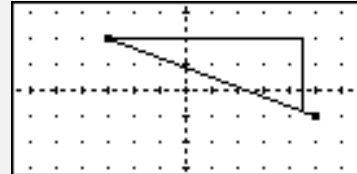
Guess Distance will prompt the student to enter the distance of the given line segment.



When the distance is entered, a message box will display the status of the entered information.



Immediately following the message box, the graph will be displayed along with a sketch of the distance in terms of x and y. In the diagram to the right, the distance entered was too low.



Guess Midpoint will prompt the student to enter the x and y coordinates for the midpoint.

GUESS THE MIDPOINT

XM =

ENTER X-COORDINATE

EDIT CANCEL OK

When the midpoint is entered, a message box will display the status of the entered information.

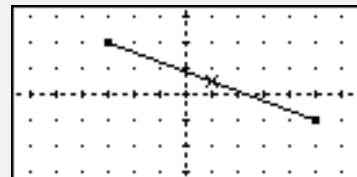
GUESS THE MIDPOINT

GREAT JOB!

ENTER THE Y-COORDINATE

OK

Immediately following the message box, the graph will be displayed along with the position of the student's guess for the midpoint plotted with an X.



Guess Slope prompts the student to enter the rise and the run of the line segment.

GUESS THE SLOPE

RISE =

ENTER RISE

EDIT CANCEL OK

When the slope is entered, a message box will display the status of the entered information.

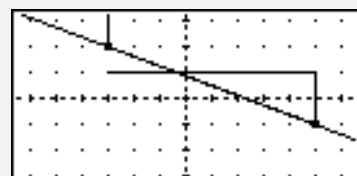
GUESS THE RUN

RU SLOPE IS INCORRECT

ENTER THE RUN

OK

Immediately following the message box, the graph will be displayed along with the rise and run of the student's guess for the slope.



Ideas can be applied to:

Algebra I, Geometry, Algebra II, Precalculus

Programs associated with this applet:

.DMS.NL, .DMS.DF, .DMS.GM, .DMS.GS, .DMS.ST, .DMS.SV