# Two Point

## Program Description:

Create a program which graphs two points and then graphs the line formed by those two points. Program finds aspects of the line through calculation.

### Rubric:

#### "B"

- Y Intercept - Midpoint - Equation - 2 points - Distance - Slope

#### "A"

- user friendliness -able to click points on graph -continuous lines -triangle form - more than 2 points

## Sample output:

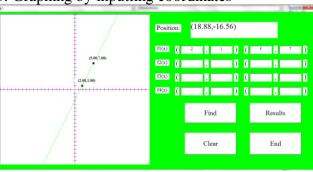
1. Gui before any input/Gui after clear button:



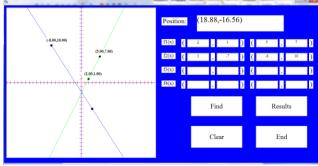
2. Graphing by clicking



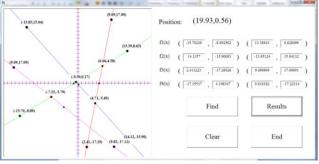
3. Graphing by inputting coordinates\*



4. Graphing Two Lines



5. More than 2 points \*\*



6. Showing the Results \*\*\*

	Line1		Line 2		1	Line 3		Line4
Equation:	Y = 0.60 x = 0.56	Equation:	Y = -1.11 x +	-0.28 Equati	onc 1	f = 5.15 x + -29.71	Equation:	Y=-0.79 x+-9.48
Slope:	0.60	Slope:	-1.11	Slope		5.15	Slope:	-0.79
Y-latercept	0.56	Y-latercept	-0.28	Y-late	rorpt	-29.71	Y-latercept:	-9.48
Midpoint	(-1.157025, -1322312)	Midpoint	(.1322317,-42	197519) Midpo	int [	(	Midpoint	(-3.768595,-6.512397)
Distance	33.96	Distance	41.71	Distan	oe	35.02	Distance	34.60
		Interse	ect Points					
	Line 1	1	ine 2	Line 3				
Line 2	(4963358, 265684)	(4.70516)	1,-5.489166)	(-63.60561,-357.)	1882)			
Line 3	(6.66009, 4.575805)	(28.9245)	9,-32.28513)				ок	
Line 4	(-7.225599,-3.787168)							

<sup>\*</sup> Program changes color based on line color

<sup>\*\*</sup>Figure 5 done through graphing by clicking, Find button finds the intersects and shows the points

<sup>\*\*\*</sup>Results are shown in different form/not required