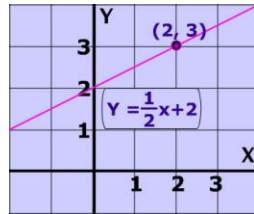


# Equation of a Line Calculator



Write a program that when given two points, calculates the slope and y intercept of the line. It should also calculate the distance between the two points.

$$y = mx + b$$

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

For example:

Equation Calculator

```
Enter the first x co-ordinate: 1
Enter the first y co-ordinate: 3
Enter the second x co-ordinate: 2
Enter the second y co-ordinate: 5
```

The slope is 2

The y-intercept is 1

The distance between the two points is 2.23606797749979