

# Class Line

java.lang.Object  
Line

public class Line  
extends java.lang.Object

## Constructor Summary

Constructors	
Constructor	Description
Line(double a)	Constructor for a vertical line with a slope of 0
Line(double m, double b)	Constructor that takes the slope as well as the vertical shift of the line
Line(double x, double y, double m)	Constructor that takes a point the line intersects with as well as its slope
Line(double x1, double y1, double x2, double y2)	Constructor that takes in two points and generates an equation with them

## Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type	Method	Description
java.lang.String	toString()	

### Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

## Constructor Details

### Line

```
public Line(double x,  
            double y,  
            double m)
```

Constructor that takes a point the line intersects with as well as its slope

**Parameters:**

x - - x coordinate of point

y - - y coordinate of point

m - - slope of line

**Line**

```
public Line(double x1,  
            double y1,  
            double x2,  
            double y2)
```

Constructor that takes in two points and generates an equation with them

**Parameters:**

x1 - - x coordinate of first point

y1 - - y coordinate of first point

x2 - - x coordinate of second point

y2 - - y coordinate of second point

**Line**

```
public Line(double m,  
            double b)
```

Constructor that takes the slope as well as the vertical shift of the line

**Parameters:**

m - - slope of the line

b - - vertical shift of the line

**Line**

```
public Line(double a)
```

Constructor for a vertical line with a slope of 0

**Parameters:**

a - - x intercept of the vertical line

## ***Method Details***

### **toString**

```
public java.lang.String toString()
```

#### **Overrides:**

toString in class java.lang.Object