

Class Monom

Constructors

Constructor and Description

`Monom(double a, int b)`

This function is the constructor it's get a as a coefficient and b as a power.

`Monom(Monom ot)`

This function is constructor to deep copy the values of one Monom to another.

`Monom(java.lang.String s)`

This function get a string and makes it Monom object;

Constructor Summary

Modifier and Type	Method and Description
boolean	<code>add(Monom a)</code> This function add to this Monom another Monom only if the values of power is equal.
Monom	<code>derivative()</code> This function is take the coefficient and multiply by the power and subtract the power with -1.
double	<code>f(double x)</code> This function is gets value x and returns the $f(x) = a \cdot x^b$.
double	<code>get_coefficient()</code>
int	<code>get_power()</code>
void	<code>multi(Monom a)</code> This function is multiply this Monom with another by multiply the coefficients and the powers
java.lang.String	<code>toString()</code> This function print the Monom as a string

Methods inherited from class java.lang.Object

`equals, getClass, hashCode, notify, notifyAll, wait, wait, wait`

Class Polynom

Constructors

Constructor and Description

`Polynom()`

a constructor for building an array to store the Monoms;

`Polynom(java.lang.String s)`

Method Summary

Modifier and Type	Method and Description
<code>void</code>	<code>add(Monom m1)</code> This function is to add a single Monom to array list;
<code>void</code>	<code>add(myMath.Polynom_able p1)</code> This function is adding two polynoms by runnig all over the array list and add between two with add Monom function
<code>double</code>	<code>area(double x0, double x1, double eps)</code> This function is compute the area above the axis x of this polynom at range of x0,x1 and step of eps.
<code>double</code>	<code>AreaUnderAxisX(double x0, double x1, double eps)</code>
<code>myMath.Polynom_able</code>	<code>copy()</code> This function is a deep copy of this polynom;
<code>myMath.Polynom_able</code>	<code>derivative()</code> This function is to derivative this polynom;
<code>void</code>	<code>DrawPolynom()</code>
<code>boolean</code>	<code>equals(myMath.Polynom_able p1)</code> This function is to check if two polynoms are equals by running over two polynoms and check if the Monoms are equals
<code>double</code>	<code>f(double x)</code> This function is gets value x and returns the $f(x) = a \cdot x^b$ over all Monom at the array list and sum them;

boolean	<code>isZero()</code> This function is to check if the polynom is zero by running over polynom and check if the coefficient at the Monoms are 0;
<code>java.util.Iterator<Monom></code>	<code>iteretor()</code> This function is to create an iterator over this polynom.
void	<code>multiply(myMath.Polynom_able p1)</code> This function is to multiply between two polynoms by running over this polynom and multiply between the Monom at this polynom and p1 Monom
double	<code>root(double x0, double x1, double eps)</code> This function is to find the cut of the polynom with axis x between the rang of x0 ,x1 and precision of eps .
int	<code>size()</code>
void	<code>substract(myMath.Polynom_able p1)</code> This function is subtract between to polynom by multiply the given polynom p1 by -1 and use the add polynom function to subtract;
<code>java.lang.String</code>	<code>toString()</code> This function print the polynom as a string
Methods inherited from class java.lang.Object	
<code>equals, getClass, hashCode, notify, notifyAll, wait, wait, wait</code>	