import java.util.Scanner;

Quadratic equation using Java

import java.lang.Math;

class quadratic

{

double d,val;

void find(double a,double b,double c)

{

if(a==0)

{

System.out.println("a cannot be zero");

return;

}

else

{

d=(b\*b)-(4\*a\*c);

}

if(d>0)

{

System.out.println("The roots are real and unique");

System.out.println((-b+Math.sqrt(d))/(2\*a)+"\n"+(-b-Math.sqrt(d))/(2\*a));

}

else if(d==0)

{

System.out.println("the roots are real and equal");

System.out.println(-b/(2\*a));

}

else

{

System.out.println("there is no real root");

double img=Math.sqrt(-d)/(2\*a);

double realpart=-b/(2\*a);

System.out.println("real part is "+realpart+" imaginary part is "+img);

}

}

}

class Main

{

public static void main(String args[])

{

quadratic ob1=new quadratic();

System.out.println("enter the value of a,b and c");

Scanner sc=new Scanner(System.in);

double a1=sc.nextDouble();

double b1=sc.nextDouble();

double c1=sc.nextDouble();

ob1.find(a1,b1,c1);

}

}



