

	Page
B)	Develop a Jaw popular that printy at real solutions to
	squate axtax+ a: o read is abic ma
	garrier the distribute b' - 496 1, - ve, display
	import java util . Scarner; a mayage stelling that there are
	no real solutions,
	Class quadratic ?
	floor 1;
	Scanar sc = new Scanar (systemin);
	Wild check w
	t check ()
	Sout (" tentor the value of a,b, and c");
	Int a = sc: nextlatus;
	1nt p = 20 vextluto.
	Int c = scruxtint ();
	if (a==0)
	sout (i' Invalid equate ");
	3
	du 1
	d= bxb-4xavc;
	Sup (d)
	Sout ("the solutions are ");
	1,4 (92) \$
	Sout ("hody are unique");
	downer 12 = (-b+ Math. sept (d)) /2 xg)
72.1	double 12 = (-b-maty.sqr+(d)) /2xa;
	·
	3 301+ C+1+ " "+ (2);
	if (q == 0)
	Sout ("note are carrel");
	double r= -b/2xa
	Sout (" r);

		classmate
		Date
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ì		
	- dip(d<0) or a production with a	g many or your O C 5
	il de de la constante de la co	
- 7	i Conid manopula est 11 al. al.	1 stockers of the
11014,13	a to Kart King a special stage of the	
	Sout ("paste cire imag many");	
	double 11 = Math-sqrt (-d)/2xa	
	double 12 = (-16)/ (2 x a);	
	sout ((12 +"+i"+ r1 + " "+	(2 + "-1" + (1))
	3	
	3	
	<u>\$</u>	100
	public chay man f	
	psvm (String () args)	A CONTRACTOR OF THE PARTY OF TH
	quadratic que hew quatratic	
	91. check U;	
	2	
	3	
,	Output	30
1	Y-21 de realization de la constant d	
	1) Knier the value of a , b, and	
	45	
	10	2) .
-	The	3) tester the volum of A, S, c
	The soliton one	
	Root, an imaginary.	-12
-	Root 1: -0,978 + 1,560	31
N. S.	CROOK 2 (-).978 - :1.560	The solution an!
200		Routy are real and extre
	2) Enter the value of a , b, c	Rost 1! 7.0
		Root 21, 5.0
	2	- ,)
	Rosy are real and equal	
	Root: -1.0	

```
import java.util.Scanner;
class Quadratic {
    float d:
    Scanner sc = new Scanner(System.in);
    void check() {
        System.out.println("Enter the values of a, b, and c:");
        int a = sc.nextInt();
        int b = sc.nextInt();
        int c = sc.nextInt();
        if (a == 0) {
            System.out.println("Invalid equation");
        } else {
            d = b * b - 4 * a * c:
            System.out.println("The solutions are:");
            if (d > 0) {
                 System.out.println("Roots are real and distinct.");
                double r1 = (-b + Math.sqrt(d)) / (2.0 * a);
                double r2 = (-b - Math.sqrt(d)) / (2.0 * a);
System.out.println("Root 1: " + r1);
                 System.out.println("Root 2: " + r2);
            } else if (d == 0) {
                System.out.println("Roots are real and equal.");
                double r = -b / (2.0 * a);
                 System.out.println("Root: " + r);
            } else {
                 System.out.println("Roots are imaginary.");
                 double real = -b / (2.0 * a);
                double imaginary = Math.sqrt(-d) / (2.0 * a);
                System.out.println("Root 1: " + real+ " + i" + imaginary);
                System.out.println("Root 2: " + real + " - i" + imaginary);
            }
       }
   1
public class quad {
    public static void main(String[] args) {
        Quadratic q1 = new Quadratic();
        q1.check();
            }
```

```
C:\Users\shett\OneDrive\Documents\javaclasslab>javac quad.java
C:\Users\shett\OneDrive\Documents\javaclasslab>java quad
Enter the values of a, b, and c:
23
45
78
The solutions are:
Roots are imaginary.
Root 1: -0.9782608695652174 + i1.5602275535650534
Root 2: -0.9782608695652174 - i1.5602275535650534
C:\Users\shett\OneDrive\Documents\javaclasslab>javac quad.java
C:\Users\shett\OneDrive\Documents\javaclasslab>java quad
Enter the values of a, b, and c:
2
Π,
The solutions are:
Roots are real and equal.
Root: -1.0
C:\Users\shett\OneDrive\Documents\javaclasslab>javac quad.java
C:\Users\shett\OneDrive\Documents\javaclasslab>java quad
Enter the values of a, b, and c:
1
-12
35
The solutions are:
Roots are real and distinct.
Root 1: 7.0
Root 2: 5.0
C:\Users\shett\OneDrive\Documents\javaclasslab>
```