

29/09/2020

Example 1

classmate

Date _____

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```
import java.util.Scanner;
import static java.lang.Math.*;
class Quadratic {
    public static void main (String [] args) {
        double a, b, c, D, r1, r2, real, imaginary;
        Scanner R = new Scanner (System.in);
        System.out.println ("Enter the coefficient");
        a = R.nextDouble();
        b = R.nextDouble();
        c = R.nextDouble();
        D = (b*b) - (4*a*c);
        if (D == 0) {
            r1 = r2 = -b/(2*a);
            System.out.println ("Roots are = "
                                + r1 + " and " + r2);
        } else if (D > 0) {
            r1 = (-b + sqrt(D)) / (2*a);
            r2 = (-b - sqrt(D)) / (2*a);
        }
```

```
System.out.println("Roots are = " + x1 + " and " + x2);
```

```
} else.
```

```
{ System.out.println("Then are no real solutions");
```

```
real = -b / (2 * a);
```

```
imaginary = sqrt(-D) / (2 * a);
```

```
System.out.println("Roots are = " + real + " and " + imaginary);
```

```
System.out.println("Real ps = " + real + " and imaginary ps = " + imaginary);
```

```
}
```

```
}
```

```
}
```