public static void main(String[] args) {

// value a, b, and c

double a = 2.3, b = 4, c = 5.6;

double root1, root2;

// calculate the determinant (b2 - 4ac)

double determinant = b \* b - 4 \* a \* c;

// check if determinant is greater than 0

if (determinant > 0) {

// two real and distinct roots

root1 = (-b + Math.sqrt(determinant)) / (2 \* a);

root2 = (-b - Math.sqrt(determinant)) / (2 \* a);

System.out.format("root1 = %.2f and root2 = %.2f", root1, root2);

}

// check if determinant is equal to 0

else if (determinant == 0) {

// two real and equal roots

// determinant is equal to 0

// so -b + 0 == -b

root1 = root2 = -b / (2 \* a);

System.out.format("root1 = root2 = %.2f;", root1);

}

// if determinant is less than zero

else {

// roots are complex number and distinct

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

double imaginary = Math.sqrt(-determinant) / (2 \* a);

System.out.format("root1 = %.2f+%.2fi", real, imaginary);

System.out.format("\nroot2 = %.2f-%.2fi", real, imaginary);

#System.out.format("\nroot2 = %.2f-%.2fi", real, imaginary); - Edit my MD

}

}

}