

Roots of the Quadratic Equation.

```
#include <stdio.h>
#include <conio.h>
#include <math.h>
void main()
{
    int a, b, c;
    float D, r1, r2, real, img;
    printf("\n Enter the coefficient of the quadratic equation: \n");
    scanf("%d%d%d", &a, &b, &c);
    D = (b*b) - (4*a*c);
    if (D > 0)
    {
        r1 = (-b + sqrt(D)) / (2*a);
        r2 = (-b - sqrt(D)) / (2*a);
        printf("The roots are %f and %f", r1, r2);
    }
    else if (D == 0)
    {
        r1 = -b / (2*a);
        r2 = r1;
        printf("The roots are %f and %f", r1, r2);
    }
    else
    {
        real = -b / (2*a);
        img = sqrt(-D) / (2*a);
        printf("The roots are %f + %fi and %f - %fi",
            real, img, real, img);
    }
    getch();
}
```