```
using System;
class Program
{
      static void Main()
      {
            double a, b, c;
            (a, b, c) = GetCoefficients();
            double[] result = CalculateRoots(a, b, c);
            if (result == null)
             {
                   Console.WriteLine("Корней нет");
             }
            else
             {
                   foreach (var root in result)
                   {
                         Console.WriteLine(root);
                   }
             }
      }
      static (double, double, double) GetCoefficients()
      {
            try
             {
                   Console.WriteLine("Введите коэффициенты a, b и с");
                   string[] input = Console.ReadLine().Split();
```

```
double a = double.Parse(input[0]);
            double b = double.Parse(input[1]);
            double c = double.Parse(input[2]);
            return (a, b, c);
      }
      catch
      {
            Console.WriteLine("Ошибка ввода данных");
            return GetCoefficients();
      }
}
static double[] CalculateRoots(double a, double b, double c)
{
      double D = b * b - 4 * a * c;
      if (D < 0)
      {
            return null;
      }
      else if (D > 0)
      {
            double[] roots = new double[4];
            try
             {
                   double r2_1 = (-b + Math.Sqrt(D)) / (2 * a);
                   double r2_2 = (-b - Math.Sqrt(D)) / (2 * a);
                   if (r2_1 >= 0)
```

```
{
                               double x1 = Math.Sqrt(r2_1);
                               double x2 = -Math.Sqrt(r2_1);
                               roots[0] = x1;
                               roots[1] = x2;
                         }
                         if (r2_2 >= 0)
                         {
                               double x3 = Math.Sqrt(r2_2);
                               double x4 = -Math.Sqrt(r2_2);
                               roots[2] = x3;
                               roots[3] = x4;
                         }
                   }
                   catch
                   {
                         Console.WriteLine("He
                                                              биквадратное
уравнение");
                         Environment.Exit(1);
                   }
                   if (roots[0] == 0 \&\& roots[2] == 0)
                         return null;
                   }
                   return roots;
             }
            else
```

```
{
                   double t = -b / (2 * a);
                   if (t > 0)
                   {
                          double[] roots = new double[2];
                          double x1 = Math.Sqrt(t);
                          double x2 = -Math.Sqrt(t);
                          roots[0] = x1;
                          roots[1] = x2;
                          return roots;
                    }
                   else
                   {
                          return null;
                   }
             }
      }
}
```