

AREA OF TRIANGLE

CODE

```
1  #include <stdio.h>
2  #include <math.h>
3  double area_of_triangle(double, double, double);
4  int main()
5  {
6      double a, b, c, area;
7      printf("Enter the lengths of sides of a triangle\n");
8      scanf("%lf%lf%lf", &a, &b, &c);
9      area = area_of_triangle(a, b, c);
10     printf("Area of the triangle = %.2lf\n", area);
11     return 0;
12 }
13 double area_of_triangle(double a, double b, double c)
14 {
15     double s, area;
16     s = (a+b+c)/2;
17     area = sqrt(s*(s-a)*(s-b)*(s-c));
18     return area;
19 }
20 |
```

OUTPUT

```
Enter the lengths of sides of a triangle
5 6 7
Area of the triangle = 14.70
```

HANDWRITTEN PROGRAM

Area of triangle by taking sides as Input.

```
#include <stdio.h>
```

```
#include <math.h>
```

```
double area_of_triangle (double, double, double);
```

```
int main ()
```

```
{ double a, b, c area;
```

```
    printf("Enter the lengths of Sides of triangle\n");
```

```
    scanf("%lf %lf %lf", &a, &b, &c);
```

```
    area = area_of_triangle (a, b, c);
```

```
    printf("Area of triangle = %.0.2lf\n", area);
```

```
    return 0;
```

```
}
```

```
double area_of_triangle ( double a, double b, double c)
```

```
{ double s, area;
```

```
    s = (a+b+c)/2;
```

```
    area = sqrt(s*(s-a)*(s-b)*(s-c));
```

```
    return area;
```

```
}
```