Namespace Homework

Classes

Triangle

Class representing triangle having 3 side a, b, and c

Class Triangle

Namespace: Homework

Assembly: triangle.dll

Class representing triangle having 3 side a, b, and c

```
public class Triangle
```

Inheritance

object ← Triangle

Inherited Members

object.Equals(object) , object.Equals(object, object) , object.GetHashCode() , object.GetType() , object.MemberwiseClone() , object.ReferenceEquals(object, object) , object.ToString()

Constructors

Triangle(double, double, double)

Triangle constructor

```
public Triangle(double a, double b, double c)
```

Parameters

a double

side a of triangle

b double

side b of triangle

c double

side c of triangle

Fields

a

variables for side a

```
public double a
```

Field Value

double

b

variables for side b

```
public double b
```

Field Value

double

c

variables for side c

```
public double c
```

Field Value

double

Methods

area()

Get area of triangle

```
public double area()
```

Returns

double

area of triangle

Remarks

Heron's formula, named after Heron of Alexandria, is a formula for finding the area of a triangle from the lengths of its sides a,b,c letting s = (a+b+c)/2 be the semiperimeter, then area T = sqrt(s(s-a)(s-b)(s-c))

check()

Check if given value is valid triangle or not

```
public bool check()
```

Returns

bool

true if valid triangle else false

Remarks

In mathematics, the triangle inequality states that for any triangle, the sum of the lengths of any two sides must be greater than or equal to the length of the remaining side. This statement permits the inclusion of degenerate triangles, but some authors, especially those writing about elementary geometry, will exclude this possibility, thus leaving out the possibility of equality If a, b, and c are the lengths of the sides of a triangle then the triangle inequality states that c <= a+b

perimeter()

Get perimeter of triangle

```
public double perimeter()
```

Returns

[double](#)

perimeter of triangle

semiperimeter()

Get semiperimeter of triangle

```
public double semiperimeter()
```

Returns

[double](#)

semiperimeter of triangle