

JAVA.LANG.MATH.TAN METHOD

http://www.tutorialspoint.com/java/lang/math_tan.htm

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Description

The **java.lang.Math.tan** returns the trigonometric tangent of an angle. Special cases:

- If the argument is NaN or an infinity, then the result is NaN.
- If the argument is zero, then the result is a zero with the same sign as the argument.

The computed result must be within 1 ulp of the exact result. Results must be semi-monotonic.

Declaration

Following is the declaration for **java.lang.Math.tan** method

```
public static double tan(double a)
```

Parameters

- **a** -- an angle, in radians.

Return Value

This method returns the tangent of the argument.

Exception

- **NA**

Example

The following example shows the usage of lang.Math.tan method.

```
package com.tutorialspoint;

import java.lang.*;

public class MathDemo {

    public static void main(String[] args) {

        // get two double numbers numbers
        double x = 45;
        double y = -180;

        // convert them in radians
        x = Math.toRadians(x);
        y = Math.toRadians(y);

        // print the tangent of these doubles
        System.out.println("Math.tan(" + x + ")=" + Math.tan(x));
        System.out.println("Math.tan(" + y + ")=" + Math.tan(y));
    }
}
```

Let us compile and run the above program, this will produce the following result:

```
Math.tan(0.7853981633974483)=0.9999999999999999
Math.tan(-3.141592653589793)=1.2246467991473532E-16
```

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