

NAME

atan, atanf, atanl - arc tangent functions of one variable

LIBRARY

Math Library (libm, -lm)

SYNOPSIS

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

double

```
atan(double x);
```

float

```
atanf(float x);
```

long double

```
atanl(long double x);
```

DESCRIPTION

The **atan()**, **atanf()**, and **atanl()** functions compute the principal value of the arc tangent of *x*.

RETURN VALUES

These functions return the arc tangent in the range [-pi/2, +pi/2] radians.

SEE ALSO

acos(3), asin(3), atan2(3), cos(3), cosh(3), math(3), sin(3), sinh(3), tan(3), tanh(3)

STANDARDS

The **atan()**, **atanf()**, and **atanl()** functions conform to ISO/IEC 9899:1999 ("ISO C99").