



Linux Ubuntu 26.04 Manual Pages on command 'atanf.3'

\$ man atanf.3

atan(3) Library Functions Manual atan(3)

NAME

atan, atanf, atanl - arc tangent function

LIBRARY

Math library (libm, -lm)

SYNOPSIS

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

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

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

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

Feature Test Macro Requirements for glibc (see feature_test_macros(7)):

atanf(), atanl():

```
_ISOC99_SOURCE || _POSIX_C_SOURCE >= 200112L
```

```
|| /* Since glibc 2.19: */ _DEFAULT_SOURCE
```

```
|| /* glibc <= 2.19: */ _BSD_SOURCE || _SVID_SOURCE
```

DESCRIPTION

These functions calculate the principal value of the arc tangent of x ; that is the value whose tangent is x .

RETURN VALUE

On success, these functions return the principal value of the arc tangent of x in radians; the return value is in the range $[-\pi/2, \pi/2]$.

If x is a NaN, a NaN is returned.

If x is $+0$ (-0), $+0$ (-0) is returned.

