

The `math.h` header file

math.h is a header file in the standard library of the C programming language designed for basic mathematical operations. Most of the functions involve the use of floating point numbers. C++ also implements these functions for compatibility reasons and declares them in the header `cmath` (the C99 functions are not available in the current C++ standard, C++ 98).

All functions that take or return an angle work in radians.

All functions take `double`s for floating-point arguments, unless otherwise specified. In C99, to work with `float`s or `long double`s, append an `f` or an `l` to the name, respectively.

Name	Description
<code>cbrt(x)</code>	cube root
<code>ceil(x)</code>	ceiling
<code>cos(x)</code>	cosine
<code>exp(x)</code>	exponential function
<code>fabs(x)</code>	absolute value of a floating point number
<code>floor(x)</code>	floor
<code>fmod(x, y)</code>	floating point remainder
<code>log(x)</code>	natural logarithm
<code>log10(x)</code>	base 10 logarithm
<code>pow(x, y)</code>	raise x to the power of y
<code>sin(x)</code>	sine
<code>sqrt(x)</code>	square root
<code>tan(x)</code>	tangent
<code>fmax(x, y)</code>	largest value of x and y
<code>fmin(x, y)</code>	smallest value of x and y

To use these functions in your program, you will need to include the `math.h` header file in your source code.

```
#include<stdio.h>
#include<math.h>
int main()
{
    int a = 144;
    printf("The square root of %d id %.2f", a, sqrt(a));
    return 0;
}
```