



C Math Functions

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Math Functions

There is also a list of math functions available, that allows you to perform mathematical tasks on numbers.

To use them, you must include the `math.h` **header file** in your program:

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

Square Root

To find the square root of a number, use the `sqrt()` function:

Example

```
printf("%f", sqrt(16));
```

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Round a Number

The `ceil()` function rounds a number upwards to its nearest integer, and the `floor()` method rounds a number downwards to its nearest integer, and returns the result:

Example

```
printf("%f", ceil(1.4));  
printf("%f", floor(1.4));
```

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Power

The `pow()` function returns the value of x to the power of y (x^y):

Example

```
printf("%f", pow(4, 3));
```

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Other Math Functions

A list of other popular math functions (from the `<math.h>` library) can be found in the table below:

Function	Description
abs(x)	Returns the absolute value of x
acos(x)	Returns the arccosine of x
asin(x)	Returns the arcsine of x
atan(x)	Returns the arctangent of x
cbrt(x)	Returns the cube root of x
cos(x)	Returns the cosine of x
exp(x)	Returns the value of E ^x
sin(x)	Returns the sine of x (x is in radians)
tan(x)	Returns the tangent of an angle

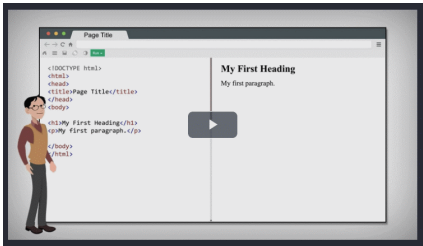
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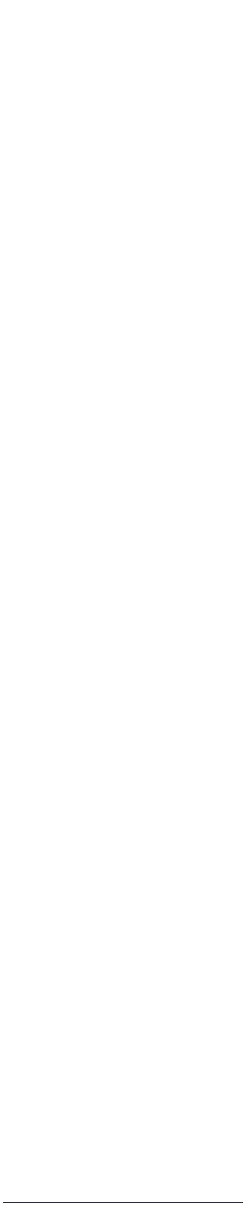
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