

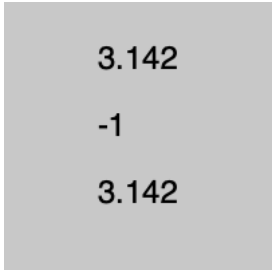
Reference > acos()

# acos()

Calculates the arc cosine of a number.

`acos()` is the inverse of `cos()`. It expects arguments in the range -1 to 1. By default, `acos()` returns values in the range 0 to  $\pi$  (about 3.14). If the `angleMode()` is `DEGREES`, then values are returned in the range 0 to 180.

## Examples



```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Calculate cos() and acos() values.
  let a = PI;
  let c = cos(a);
  let ac = acos(c);

  // Display the values.
  text(`${round(a, 3)}`, 35, 25);
  text(`${round(c, 3)}`, 35, 50);
  text(`${round(ac, 3)}`, 35, 75);

  describe('The numbers 3.142, -1, and 3.142 written on separate rows.');
```



```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Calculate cos() and acos() values.
  let a = PI + QUARTER_PI;
  let c = cos(a);
  let ac = acos(c);

  // Display the values.
  text(`${round(a, 3)}`, 35, 25);
  text(`${round(c, 3)}`, 35, 50);
  text(`${round(ac, 3)}`, 35, 75);

  describe('The numbers 3.927, -0.707, and 2.356 written on separate rows.');
```

## Syntax

```
acos(value)
```

## Parameters

value      Number: value whose arc cosine is to be returned.

## Returns

Number: arc cosine of the given value.

This page is generated from the comments in [src/math/trigonometry.js](#). Please feel free to edit it and submit a pull request!

## Related References

<b>acos</b> Calculates the arc cosine of a number.	<b>angleMode</b> Changes the unit system used to measure angles.	<b>asin</b> Calculates the arc sine of a number.	<b>atan</b> Calculates the arc tangent of a number.
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p5.js

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