

asin()

Calculates the arc sine of a number.

`asin()` is the inverse of `sin()`. It expects input values in the range of -1 to 1. By default, `asin()` returns values in the range $-\pi/2$ (about -1.57) to $\pi/2$ (about 1.57). If the `angleMode()` is `DEGREES` then values are returned in the range -90 to 90.

Examples

1.047
0.866
1.047



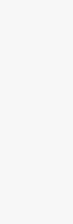
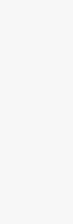
```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Calculate sin() and asin() values.
  let a = PI / 3;
  let s = sin(a);
  let as = asin(s);

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

  describe('The numbers 1.047, 0.866, and 1.047 written on
separate rows.');
}
```



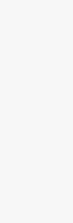
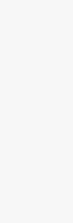
```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Calculate sin() and asin() values.
  let a = PI + PI / 3;
  let s = sin(a);
  let as = asin(s);

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

  describe('The numbers 4.189, -0.866, and -1.047 written on
separate rows.');
}
```



Syntax

`asin(value)`



Parameters

`value` Number: value whose arc sine is to be returned.

Returns

Number: arc sine 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

`acos`

Calculates the arc cosine of a number.

`angleMode`

Changes the unit system used to measure angles.

`asin`

Calculates the arc sine of a number.

`atan`

Calculates the arc tangent of a number.

