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 -π ÷ 2 (about -1.57) to π ÷ 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.

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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.