tan()

Calculates the tangent of an angle.

`tan()` is useful for many geometric tasks in creative coding. The values returned range from -Infinity to Infinity and repeat periodically as the input angle increases. `tan()` calculates the tan of an angle, using radians by default, or according to if angleMode() setting (RADIANS or DEGREES).

Examples

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

  background(200);

  describe('A series of identical curves drawn with black dots. Each curve starts from the top of the canvas, continues down at a slight angle, flattens out at the middle of the canvas, then continues to the bottom.');
}

function draw() {
  // Calculate the coordinates.
  let x = frameCount;
  let y = 5 * tan(x * 0.1) + 50;

  // Draw the point.
  point(x, y);
}
```

Syntax

```
tan(angle)
```

Parameters

angle	Number: the angle, in radians by default, or according to if angleMode() setting (RADIANS or DEGREES).

Returns

Number: tangent of the angle.

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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.