

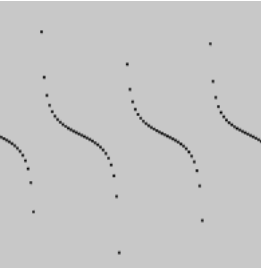
Reference > tan()

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.

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.
---	---	---	--

p5.js

Resources

Information

Socials

Reference
Tutorials
Examples
Contribute
Community
About
Start Coding
Donate

Download
Contact
Copyright
Privacy Policy
Terms of Use

GitHub ↗
Instagram ↗
X ↗
YouTube ↗
Discord ↗
Forum ↗

