

fromAngle()

Creates a new 2D vector from an angle.

Examples

```
function setup() {
  // Create a p5.Vector object.
  let v = p5.Vector.fromAngle(0);

  // Prints "p5.Vector Object : [1, 0, 0]" to the console.
  print(v.toString());
}
```

```
function setup() {
  // Create a p5.Vector object.
  let v = p5.Vector.fromAngle(0, 30);

  // Prints "p5.Vector Object : [30, 0, 0]" to the console.
  print(v.toString());
}
```

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

  describe('A black arrow extends from the center of a gray square. It points to the right.');
}

function draw() {
  background(200);

  // Create a p5.Vector to the center.
  let v0 = createVector(50, 50);

  // Create a p5.Vector with an angle 0 and magnitude 30.
  let v1 = p5.Vector.fromAngle(0, 30);

  // Draw the black arrow.
  drawArrow(v0, v1, 'black');
}

// Draws an arrow between two vectors.
function drawArrow(base, vec, myColor) {
  push();
  stroke(myColor);
  strokeWeight(3);
  fill(myColor);
  translate(base.x, base.y);
  line(0, 0, vec.x, vec.y);
  rotate(vec.heading());
  let arrowSize = 7;
```

Syntax

```
fromAngle(angle, [length])
```

Parameters

angle Number: desired angle, in radians. Unaffected by [angleMode\(\)](#).
length Number: length of the new vector (defaults to 1).

Returns

p5.Vector: new p5.Vector object.

This page is generated from the comments in [src/math/p5.Vector.js](#). Please feel free to edit it and submit a pull request!

Related References

[add](#)
Adds to a vector's x, y, and z components.

[angleBetween](#)
Calculates the angle between two vectors.

[array](#)
Returns the vector's components as an array of numbers.

[clampToZero](#)
Replaces the components of a p5.Vector that are very close to zero with zero.

