

# 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

<b>add</b> Adds to a vector's x, y, and z components.	<b>angleBetween</b> Calculates the angle between two vectors.	<b>array</b> Returns the vector's components as an array of numbers.	<b>clampToZero</b> Replaces the components of a p5.Vector that are very close to zero with zero.
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