fromAngles()

Creates a new 3D vector from a pair of ISO spherical angles.

Examples

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

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

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

  describe('A light shines on a pink sphere as it orbits.');
}

function draw() {
  background(0);

  // Calculate the ISO angles.
  let theta = frameCount *  0.05;
  let phi = 0;

  // Create a p5.Vector object.
  let v = p5.Vector.fromAngles(theta, phi, 100);

  // Create a point light using the p5.Vector.
  let c = color('deeppink');
  pointLight(c, v);

  // Style the sphere.
  fill(255);
  noStroke();

  // Draw the sphere.
  sphere(35);
}
```

Syntax

```
fromAngles(theta, phi, [length])
```

Parameters

theta	Number: polar angle in radians (zero is up).
phi	Number: azimuthal angle in radians (zero is out of the screen).
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.

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Reference

Vector
add()
angleBetween()
array()
clampToZero()
copy()
cross()
dist()
div()
dot()
equals()
fromAngle()
fromAngles()
heading()
lerp()
limit()
mag()
magSq()
mult()
normalize()