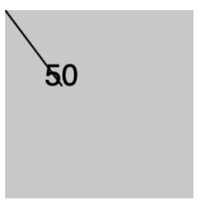
mag()

Calculates the magnitude (length) of the vector.

Use mag() to calculate the magnitude of a 2D vector using components as in `mag(x, y)`.

Examples




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

  background(200);

  // Create a p5.Vector object.
  let p = createVector(30, 40);

  // Draw a line from the origin.
  line(0, 0, p.x, p.y);

  // Style the text.
  textAlign(CENTER);
  textSize(16);

  // Display the vector's magnitude.
  let m = p.mag();
  text(m, p.x, p.y);

  describe('A diagonal black line extends from the top left corner of a gray square. The number 50 is written at the end of the line.');
}
```

Syntax

```
mag()
```

```
mag(vecT)
```

Parameters

vecT	p5.Vector: The vector to return the magnitude of

Returns

Number: magnitude of the vector.

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.