

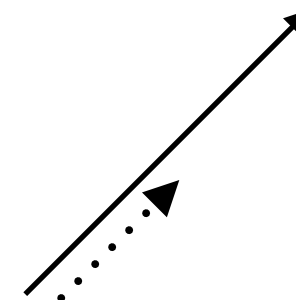
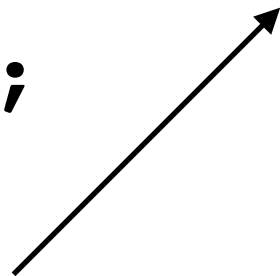
# Reference

<https://processing.org/reference/>

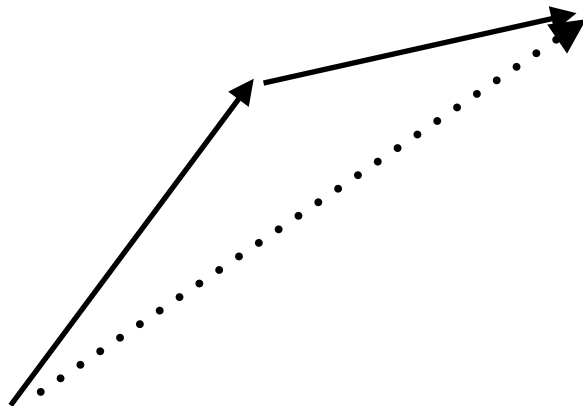
# Vectors

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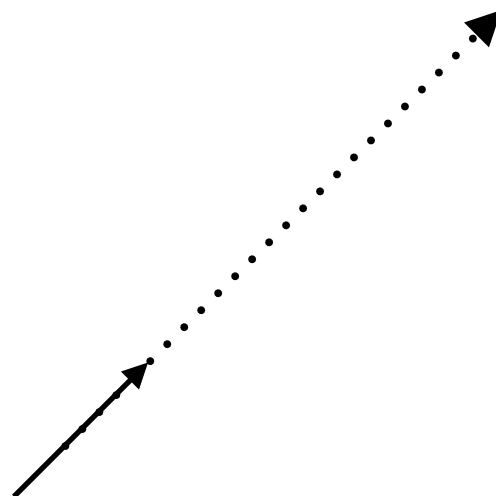
**PVector vec;**



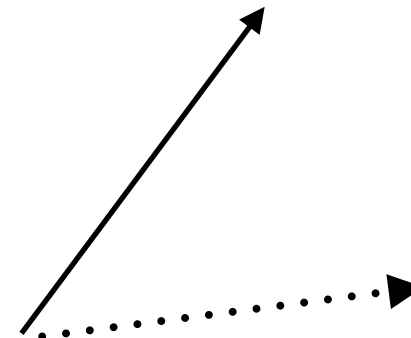
normalize



add



mult



rotate

# Vectors

**PVector vec;**

Fields

**x**

The x component of the vector

**y**

The y component of the vector

**z**

The z component of the vector

Methods

**set()**

Set the x, y, and z component of the vector

**set()**

Set the x, y components of the vector

**random2D()**

Make a new 2D unit vector with a random direction.

**random3D()**

Make a new 3D unit vector with a random direction.

**fromAngle()**

Make a new 2D unit vector from an angle

...

# Vectors

## Example

```
PVector v1, v2;

void setup() {
  noLoop();
  v1 = new PVector(40, 20, 0);
  v2 = new PVector(25, 50, 0);
}

void draw() {
  ellipse(v1.x, v1.y, 12, 12);
  ellipse(v2.x, v2.y, 12, 12);
  v2.add(v1);
  ellipse(v2.x, v2.y, 24, 24);
}
```

# HSB

```
colorMode(HSB, 360, 100, 100);
```

hue : 360°

saturation: 100

brightness: 100