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rem()

Performs modulo (remainder) division with a vector's `x`, `y`, and `z` components.

`rem()` can use separate numbers, as in `v.rem(1, 2, 3)`, another `p5.Vector` object, as in `v.rem(v2)`, or an array of numbers, as in `v.rem([1, 2, 3])`.

If only one value is provided, as in `v.rem(2)`, then all the components will be set to their values modulo 2. If two values are provided, as in `v.rem(2, 3)`, then `v.z` won't change. Calling `rem()` with no arguments, as in `v.rem()`, has no effect.

The static version of `rem()`, as in `p5.Vector.rem(v2, v1)`, returns a new `p5.Vector` object and doesn't change the originals.

Examples

```
function setup() {
  // Create a p5.Vector object.
  let v = createVector(3, 4, 5);

  // Divide numbers.
  v.rem(2);

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

```
function setup() {
  // Create a p5.Vector object.
  let v = createVector(3, 4, 5);

  // Divide numbers.
  v.rem(2, 3);

  // Prints 'p5.Vector Object : [1, 1, 5]'.
  print(v.toString());
}
```

```
function setup() {
  // Create a p5.Vector object.
  let v = createVector(3, 4, 5);

  // Divide numbers.
  v.rem(2, 3, 4);

  // Prints 'p5.Vector Object : [1, 1, 1]'.
  print(v.toString());
}
```

```
function setup() {
  // Create p5.Vector objects.
  let v1 = createVector(3, 4, 5);
  let v2 = createVector(2, 3, 4);

  // Divide a p5.Vector.
  v1.rem(v2);

  // Prints 'p5.Vector Object : [1, 1, 1]'.
  print(v1.toString());
}
```

```
function setup() {
  // Create p5.Vector objects.
  let v1 = createVector(3, 4, 5);
  let v2 = createVector(2, 3, 4);

  // Divide without modifying the original vectors.
  let v3 = p5.Vector.rem(v1, v2);

  // Prints 'p5.Vector Object : [1, 1, 1]'.
  print(v3.toString());
}
```

Syntax

```
rem(x, y, z)
```

```
rem(value)
```

```
rem(v1, v2)
```

```
rem(v1, v2)
```

Parameters

<code>x</code>	Number: x component of divisor vector.
<code>y</code>	Number: y component of divisor vector.
<code>z</code>	Number: z component of divisor vector.
<code>value</code>	<code>p5.Vector Number[]</code> : divisor vector.
<code>v1</code>	<code>p5.Vector</code> : The dividend <code>p5.Vector</code>
<code>v2</code>	<code>p5.Vector</code> : The divisor <code>p5.Vector</code>

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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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