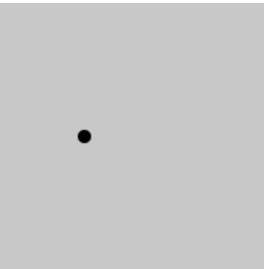


# constrain()

Constrains a number between a minimum and maximum value.

## Examples



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

  describe('A black dot drawn on a gray square follows the mouse from left to right. Its movement is constrained to the middle third of the square.');
```

```
function draw() {
  background(200);

  let x = constrain(mouseX, 33, 67);
  let y = 50;

  strokeWeight(5);
  point(x, y);
}
```



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

  describe('Two vertical lines. Two circles move horizontally with the mouse. One circle stops at the vertical lines.');
```

```
function draw() {
  background(200);

  // Set boundaries and draw them.
  let leftWall = 25;
  let rightWall = 75;
  line(leftWall, 0, leftWall, 100);
  line(rightWall, 0, rightWall, 100);

  // Draw a circle that follows the mouse freely.
  fill(255);
  circle(mouseX, 33, 9);

  // Draw a circle that's constrained.
  let xc = constrain(mouseX, leftWall, rightWall);
  fill(0);
  circle(xc, 67, 9);
}
```

## Syntax

```
constrain(n, low, high)
```

## Parameters

n	Number: number to constrain.
low	Number: minimum limit.
high	Number: maximum limit.

## Returns

Number: constrained number.

This page is generated from the comments in [src/math/calculation.js](#) . Please feel free to edit it and submit a pull request!

## Related References

<b>abs</b> Calculates the absolute value of a number.	<b>ceil</b> Calculates the closest integer value that is greater than or equal to a number.	<b>constrain</b> Constrains a number between a minimum and maximum value.	<b>dist</b> Calculates the distance between two points.
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