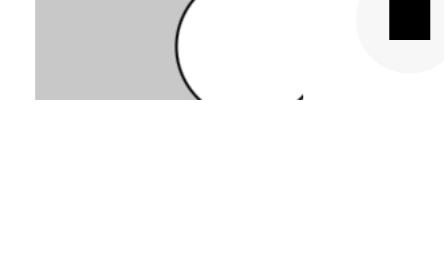


exp()

Calculates the value of Euler's number e (2.71828...) raised to the power of a number.

Examples



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

  background(200);

  // Top-left.
  let d = exp(1);
  circle(10, 10, d);

  // Left-center.
  d = exp(2);
  circle(20, 20, d);

  // Right-center.
  d = exp(3);
  circle(40, 40, d);

  // Bottom-right.
  d = exp(4);
  circle(80, 80, d);

  describe('A series of circles that grow exponentially from top left to bottom right.');
}
```



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

  background(200);

  describe('A series of black dots that grow exponentially from left to right.');

  function draw() {
    // Invert the y-axis.
    scale(1, -1);
    translate(0, -100);

    // Calculate the coordinates.
    let x = frameCount;
    let y = 0.005 * exp(x * 0.1);

    // Draw a point.
    point(x, y);
  }
}
```

Syntax

`exp(n)`



Parameters

`n` Number: exponent to raise.

Returns

Number: e^n

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

abs

Calculates the absolute value of a number.

ceil

Calculates the closest integer value that is greater than or equal to a number.

constrain

Constrains a number between a minimum and maximum value.

dist

Calculates the distance between two points.

