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sphere()

Draws a sphere.

A sphere is a 3D shape with triangular faces that connect to form a round surface. Spheres with few faces look like crystals. Spheres with many faces have smooth surfaces and look like balls.

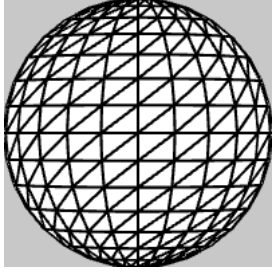
The first parameter, `radius`, is optional. If a `Number` is passed, as in `sphere(20)`, it sets the radius of the sphere. By default, `radius` is 50.

The second parameter, `detailX`, is also optional. If a `Number` is passed, as in `sphere(20, 5)`, it sets the number of triangle subdivisions to use along the x-axis. All 3D shapes are made by connecting triangles to form their surfaces. By default, `detailX` is 24.

The third parameter, `detailY`, is also optional. If a `Number` is passed, as in `sphere(20, 5, 2)`, it sets the number of triangle subdivisions to use along the y-axis. All 3D shapes are made by connecting triangles to form their surfaces. By default, `detailY` is 16.

Note: `sphere()` can only be used in WebGL mode.

Examples



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■

```
// Click and drag the mouse to view the scene from different angles.

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

  describe('A white sphere on a gray background.');
```

▶

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```

Syntax

```
sphere([radius], [detailX], [detailY])
```

Parameters

- radius

Number: radius of the sphere. Defaults to 50.
- detailX

Integer: number of triangle subdivisions along the x-axis. Defaults to 24.
- detailY

Integer: number of triangle subdivisions along the y-axis. Defaults to 16.

This page is generated from the comments in [src/webgl/3d_primitives.js](#). Please feel free to edit it and submit a pull request!

Related References

- calculateBoundingBox

Calculates the position and size of the smallest box that contains the geometry.
- clearColors

Removes the geometry's internal colors.
- computeFaces

Computes the geometry's faces using its vertices.
- computeNormals

Calculates the normal vector for each vertex on the geometry.

p5.js

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