

# vertices

An array with the geometry's vertices.

The geometry's vertices are stored as **p5.Vector** objects in the `myGeometry.vertices` array. The geometry's first vertex is the **p5.Vector** object at `myGeometry.vertices[0]`, its second vertex is `myGeometry.vertices[1]`, its third vertex is `myGeometry.vertices[2]`, and so on.

## Examples



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

```
let myGeometry;

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

  // Create a p5.Geometry object.
  myGeometry = new p5.Geometry();

  // Create p5.Vector objects to position the vertices.
  let v0 = createVector(-40, 0, 0);
  let v1 = createVector(0, -40, 0);
  let v2 = createVector(40, 0, 0);

  // Add the vertices to the p5.Geometry object's vertices array.
  myGeometry.vertices.push(v0, v1, v2);

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

```
}

function draw() {
  background(200);

  // Enable orbiting with the mouse.
  orbitControl();
```



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

```
let myGeometry;

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

  // Create a p5.Geometry object.
  beginGeometry();
  torus(30, 15, 10, 8);
  myGeometry = endGeometry();

  describe('A white torus rotates slowly against a dark gray background. Red spheres mark its vertices.');
```

```
}

function draw() {
  background(50);

  // Enable orbiting with the mouse.
  orbitControl();

  // Turn on the lights.
  lights();

  // Rotate the coordinate system.
  rotateY(frameCount * 0.01);

  // Style the p5.Geometry object.
  fill(255);
```

This page is generated from the comments in [src/webgl/p5.Geometry.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.

