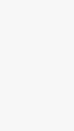
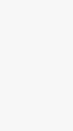


# upZ

The z-component of the camera's "up" vector.

The camera's "up" vector orients its y-axis. By default, the "up" vector is `(0, 1, 0)`, so its z-component is 0 in "local" space.

## Examples


[Reference](#)
[Camera](#)

camera()  
centerX  
centerY  
centerZ  
eyeX  
eyeY  
eyeZ  
frustum()  
lookAt()  
move()  
ortho()  
pan()  
perspective()  
roll()  
set()  
setPosition()  
slerp()  
tilt()  
upX

```
let cam;
let font;

// Load a font and create a p5.Font object.
function preload() {
  font = loadFont('/assets/inconsolata.otf');
}

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

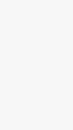
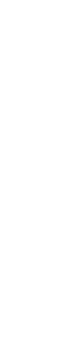
  // Create a p5.Camera object.
  cam = createCamera();

  // Place the camera at the top-right: (100, -400, 800)
  // Point it at the origin: (0, 0, 0)
  // Set its "up" vector: (0, 1, 0).
  cam.camera(100, -400, 800, 0, 0, 0, 0, 1, 0);

  describe(
    'A white cube on a gray background. The text "upZ: 0" is
    written in black beneath it.'
  );
}

function draw() {
  background(200);

  // Style the box.
  fill(255);
```



```
let cam;
let font;

// Load a font and create a p5.Font object.
function preload() {
  font = loadFont('/assets/inconsolata.otf');
}

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

  // Create a p5.Camera object.
  cam = createCamera();

  // Place the camera at the top-right: (100, -400, 800)
  // Point it at the origin: (0, 0, 0)
  // Set its "up" vector: (0, 1, 0).
  cam.camera(100, -400, 800, 0, 0, 0, 0, 1, 0);

  describe(
    'A white cube on a gray background. The cube appears to
    rock back and forth. The text "upZ: z" is written in black
    beneath it. Z oscillates between -1 and 1.'
  );
}

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

This page is generated from the comments in [src/webgl/p5.Camera.js](#). Please feel free to edit it and submit a pull request!

## Related References

[camera](#)

Sets the position and orientation of the camera.

[centerX](#)

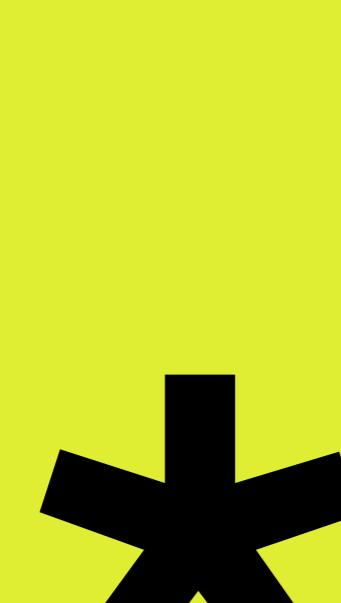
The x-coordinate of the place where the camera looks.

[centerY](#)

The y-coordinate of the place where the camera looks.

[centerZ](#)

The z-coordinate of the place where the camera looks.



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