

# CSS 3D Transforms

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## CSS 3D Transforms

CSS also supports 3D transformations.

Mouse over the elements below to see the difference between a 2D and a 3D transformation:

2D  
rotate

3D  
rotate

In this chapter you will learn about the following CSS property:

- `transform`

## Browser Support

The numbers in the table specify the first browser version that fully supports the property.

Property					
transform	36.0	10.0	16.0	9.0	23.0

## CSS 3D Transforms Methods



- `rotateX()`
- `rotateY()`
- `rotateZ()`

## The rotateX() Method



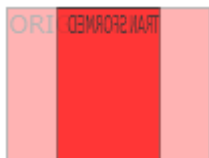
The `rotateX()` method rotates an element around its X-axis at a given degree:

### Example

```
#myDiv {  
  transform: rotateX(150deg);  
}
```

Try it Yourself »

## The rotateY() Method



The `rotateY()` method rotates an element around its Y-axis at a given degree:

### Example

```
#myDiv {  
  transform: rotateY(150deg);  
}
```



# The rotateZ() Method

The `rotateZ()` method rotates an element around its Z-axis at a given degree:

## Example

```
#myDiv {  
  transform: rotateZ(90deg);  
}
```

Try it Yourself »

## Test Yourself With Exercises

### Exercise:

With the `transform` property, rotate the `<div>` element 150deg around its X-axis..

```
<style>  
div {  
  width: 100px;  
  height: 100px;  
  background-color: lightblue;  
  border: 1px solid black;  
  transform: rotateX(150deg);  
}  
</style>
```



&lt;/body&gt;

[Submit Answer »](#)[Start the Exercise](#)

## CSS Transform Properties

The following table lists all the 3D transform properties:

Property	Description
<a href="#"><u>transform</u></a>	Applies a 2D or 3D transformation to an element
<a href="#"><u>transform-origin</u></a>	Allows you to change the position on transformed elements
<a href="#"><u>transform-style</u></a>	Specifies how nested elements are rendered in 3D space
<a href="#"><u>perspective</u></a>	Specifies the perspective on how 3D elements are viewed
<a href="#"><u>perspective-origin</u></a>	Specifies the bottom position of 3D elements
<a href="#"><u>backface-visibility</u></a>	Defines whether or not an element should be visible when not facing the screen

## CSS 3D Transform Methods

Function	Description
<code>matrix3d</code>	Defines a 3D transformation, using a 4x4 matrix of 16 values ( <i>n,n,n,n,n,n,n,n,n,n,n,n,n,n,n,n</i> )
<code>translate3d(x,y,z)</code>	Defines a 3D translation
<code>translateX(x)</code>	Defines a 3D translation, using only the value for the X-axis

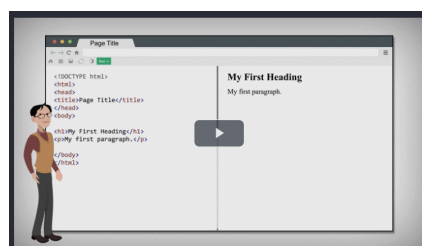


<code>translateZ(z)</code>	Defines a 3D translation, using only the value for the Z-axis
<code>scale3d(x,y,z)</code>	Defines a 3D scale transformation
<code>scaleX(x)</code>	Defines a 3D scale transformation by giving a value for the X-axis
<code>scaleY(y)</code>	Defines a 3D scale transformation by giving a value for the Y-axis
<code>scaleZ(z)</code>	Defines a 3D scale transformation by giving a value for the Z-axis
<code>rotate3d(x,y,z,angle)</code>	Defines a 3D rotation
<code>rotateX(angle)</code>	Defines a 3D rotation along the X-axis
<code>rotateY(angle)</code>	Defines a 3D rotation along the Y-axis
<code>rotateZ(angle)</code>	Defines a 3D rotation along the Z-axis
<code>perspective(n)</code>	Defines a perspective view for a 3D transformed element

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