

# Transforms

# Transforms

- **Provide option for changing the appearance of elements**
- **Two-dimensional**
- **Three-dimensional**



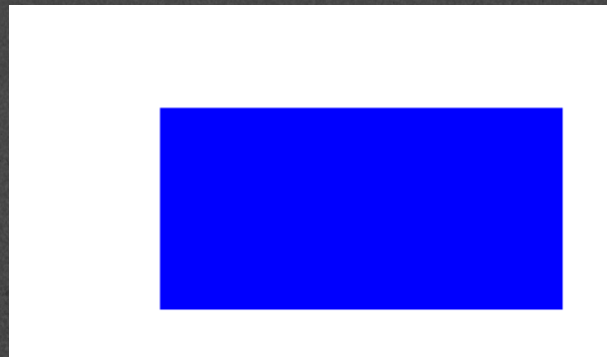
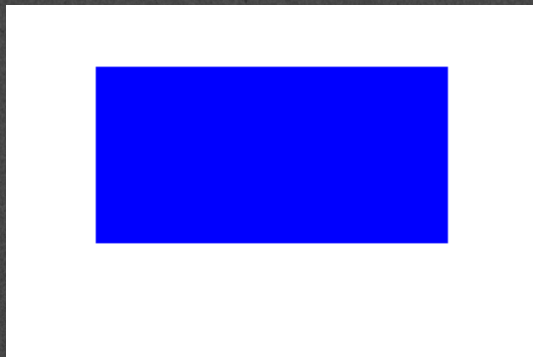
## 2D Transform Options

- Options
  - **translate**
  - **rotate**
  - **scale**
  - **skew**
  - **matrix**

## translate

- **transform:translate(x, y);**
  - move x pixels to the left/right and y pixel up/down

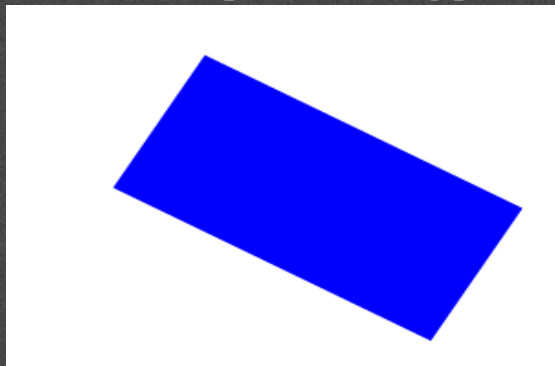
**transform:translate(100, 75);**



## rotate

- **transform:rotate(deg);**
  - Rotate/"spin" the element a certain number of degrees

**transform:rotate(30deg);**

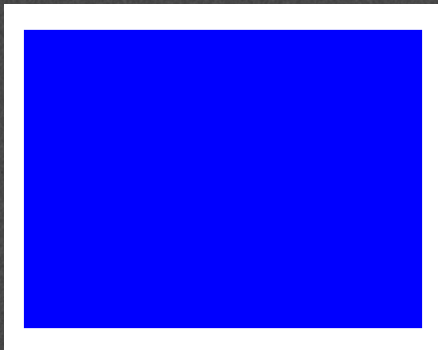
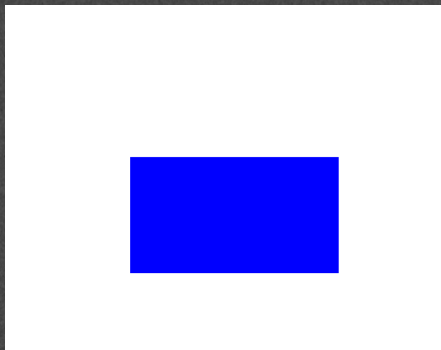




## scale

- **`transform:scale(width, height);`**
  - Change the width and height of the element

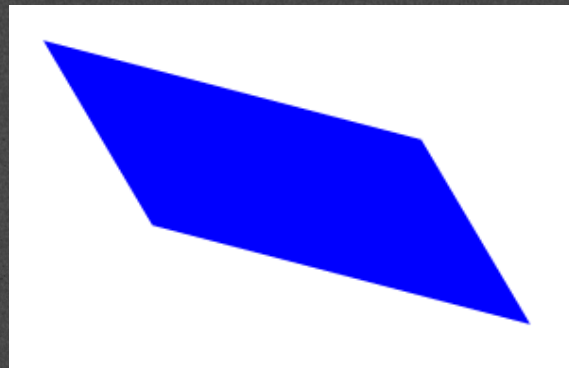
**`transform:scale(2,3);`**



## skew

- **transform:skew(x-angle, y-angle);**
  - Rotate the element a certain number of degrees along the x and y axis

**transform:skew(30deg, 15deg)**



# matrix

- **matrix()** - combines all of the 2D transform methods into one



## 3D rotate

- You can rotate along the x, y, or z dimension along a given degree
- `transform: rotateY(deg)`
- `transform: rotateX(deg)`
- `transform: rotateZ(deg)`
- `transform: rotate3d(x, y, z)`

## Others

- **3D scale**
- **3D translate**



## Review

- **Transforms are one more way to modify the look of your page.**
- **Often combined with state changes**
- **Will typically require browser prefixes.**



# Acknowledgements/Contributions

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