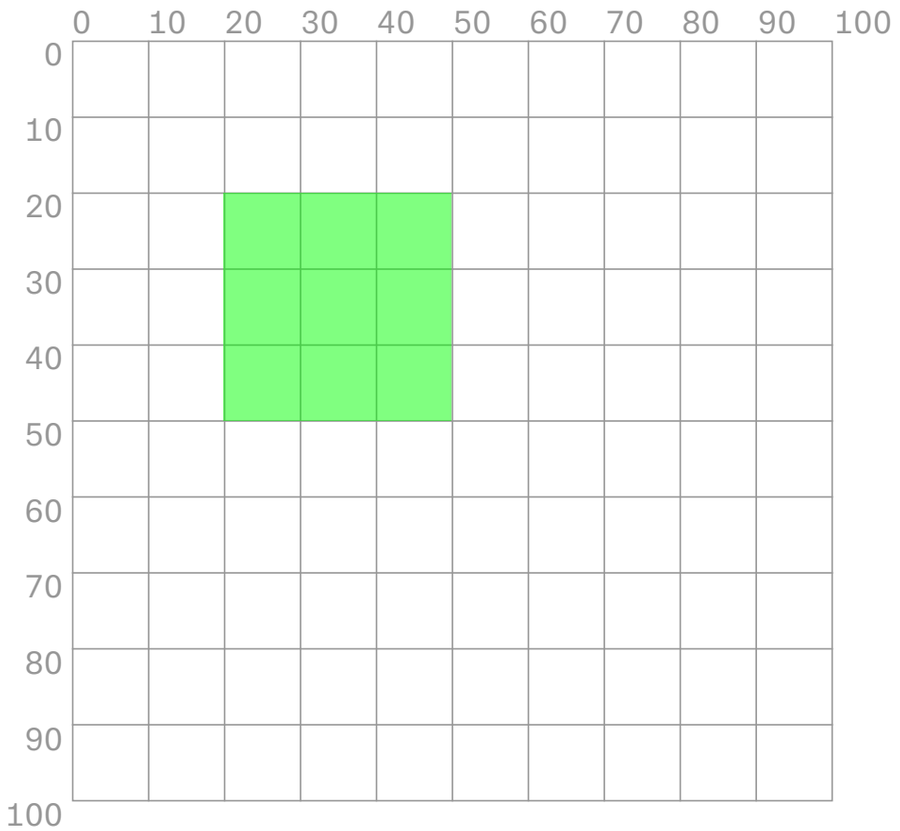
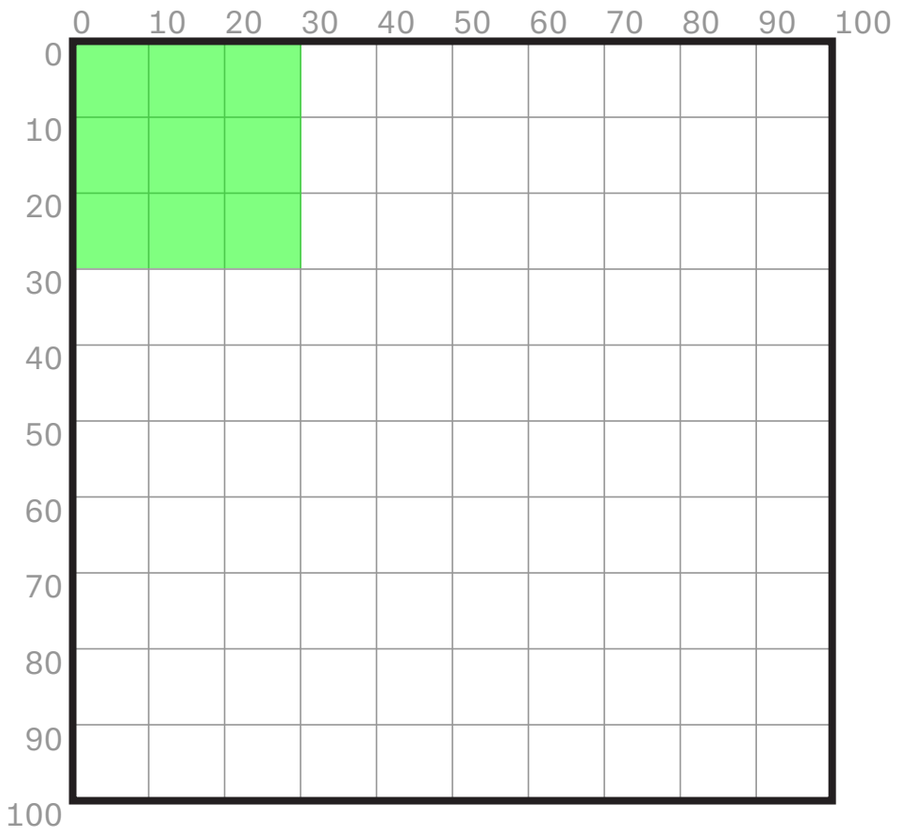
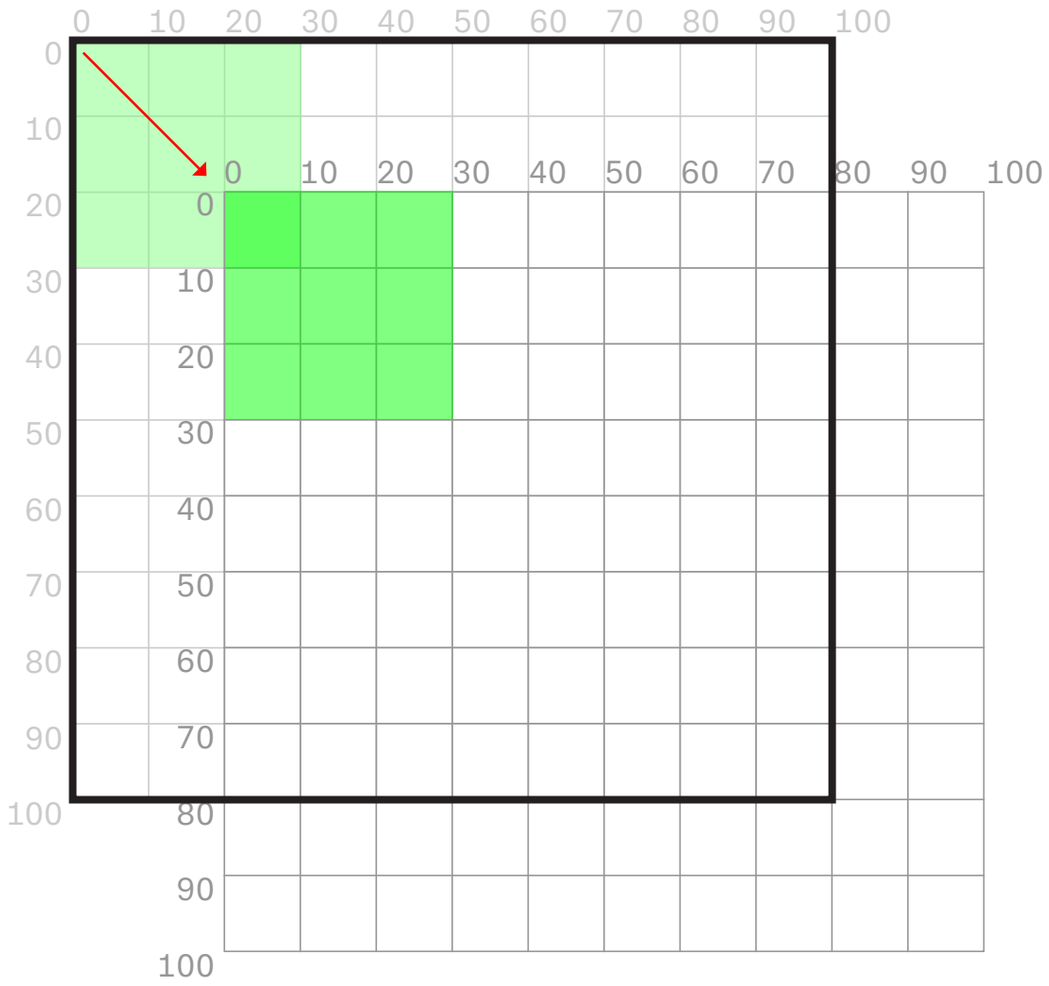
Transformations



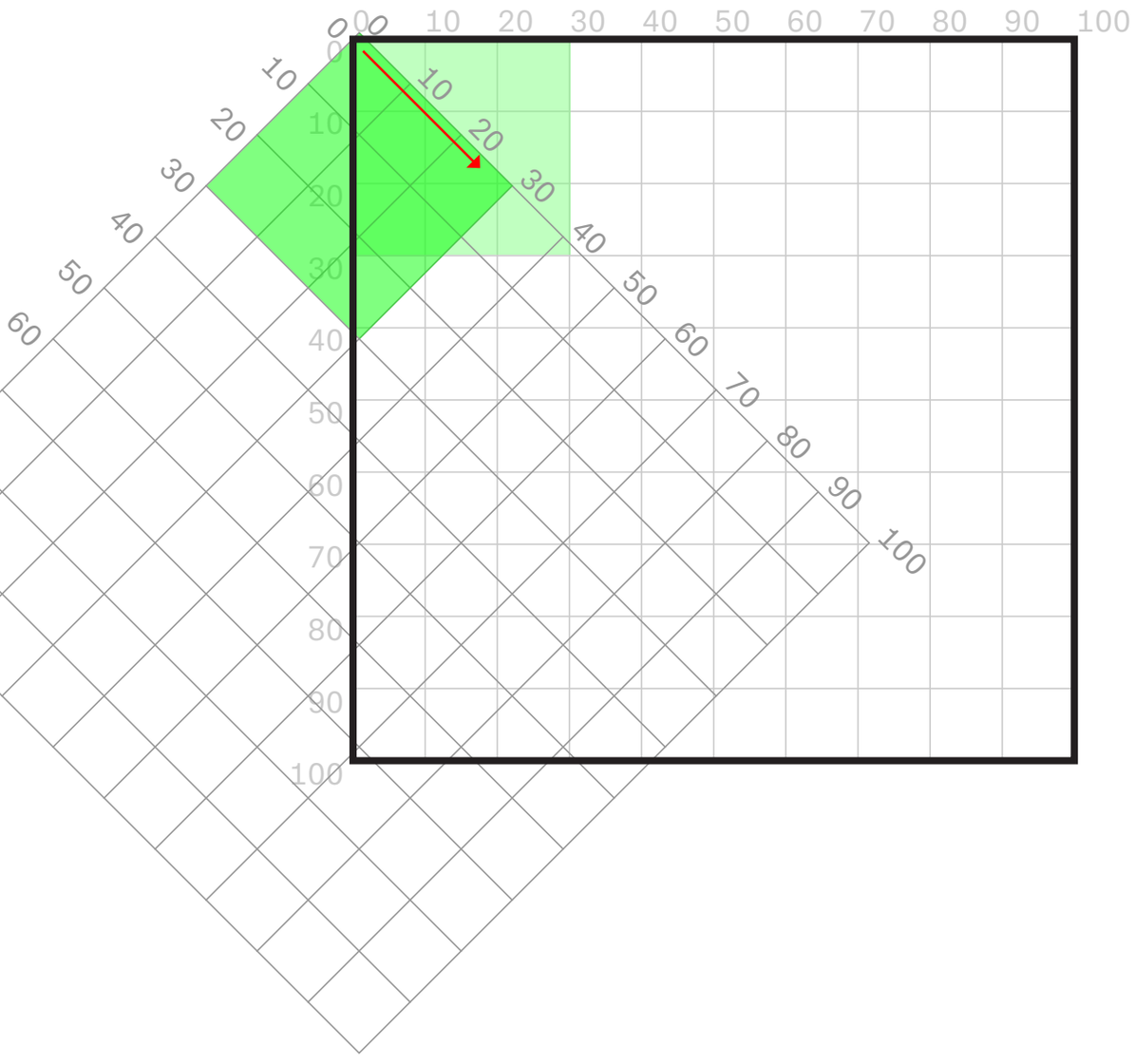

```
rect(20, 20, 30, 30);
```




```
rect(0, 0, 30, 30);
```




```
translate(20, 20);
rect(0, 0, 30, 30);
```




```
rotate(rotate(45));
rect(0, 0, 30, 30);
```

Sketch_18_Transformations_1 | Processing 3.0.2
Java
Sketch_18_Transformations_1
1 // create a variable to hold a shape
2 PShape myShape1;
3
4 void setup() {
5 size(500, 500);
6 background(255);
7
8 // load the shape
9 myShape1 = loadShape("0.svg");
10
11 // disable its style
12 myShape1.disableStyle();
13 }
14
15 void draw() {
16 background(255);
17
18 // translate the pixels to where the mouse is
19 translate(mouseX, mouseY);
20
21 // draw the shape
22 shape(myShape1, 0, 0);
23 }
24
25
26
27
28
Console
Errors

Sketch_18_Transformations_1 | Processing 3.0.2

Java ▾

Sketch_18_Transformations_1

```
// create a variable to hold a shape
PShape myShape1;

void setup() {
  size(500, 500);
  background(255);

  // load the shape
  myShape1 = loadShape("0.svg");

  // disable its style
  myShape1.disableStyle();
}

void draw() {
  background(255);

  // translate the pixels to where the mouse is
  translate(mouseX, mouseY);

  // rotate the pixels
  rotate(radians(frameCount));

  // draw the shape
  shape(myShape1, 0, 0);
}
```

Console Errors

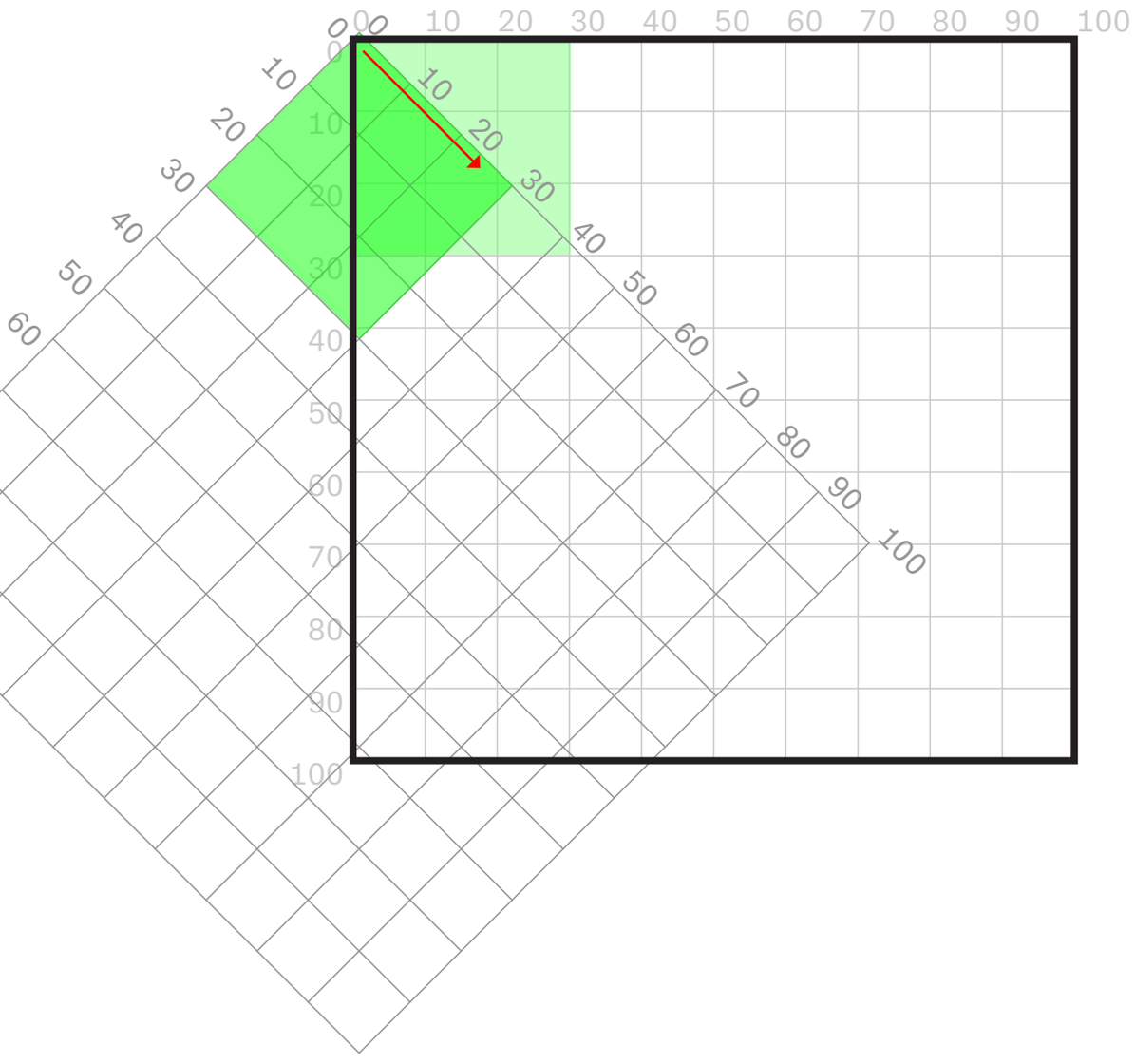
Sketch_18_Transformations_1 | Processing 3.0.2

Java ▾

Sketch_18_Transformations_1

```
// create a variable to hold a shape
PShape myShape1;

void setup() {
  size(500, 500);
  background(255);

  // load the shape
  myShape1 = loadShape("0.svg");

  // disable its style
  myShape1.disableStyle();
}

void draw() {
  background(255);

  // translate the pixels to where the mouse is
  translate(mouseX, mouseY);

  // rotate the pixels
  rotate(radians(frameCount * 5));

  // draw the shape
  shape(myShape1, 0, 0);
}
```

Console Errors




```
rotate(rotate(45));
rect(0, 0, 30, 30);
```

Sketch_18_Transformations_1 | Processing 3.0.2

Java ▾

Sketch_18_Transformations_1

```
1  // create a variable to hold a shape
2  PShape myShape1;
3
4  void setup() {
5    size(500, 500);
6    background(255);
7
8    // load the shape
9    myShape1 = loadShape("0.svg");
10
11   // disable its style
12   myShape1.disableStyle();
13 }
14
15 void draw() {
16   background(255);
17
18   // translate the pixels to where the mouse is
19   translate(mouseX, mouseY);
20
21   // rotate the pixels
22   rotate(radians(frameCount * 5));
23
24   // draw the shape
25   shape(myShape1, -50, -50);
26 }
27
28
```

Console Errors

Sketch_18_Transformations_1 | Processing 3.0.2

Java ▾

Sketch_18_Transformations_1

```
// create a variable to hold a shape
PShape myShape1;

void setup() {
  size(500, 500);
  background(255);

  // load the shape
  myShape1 = loadShape("0.svg");

  // disable its style
  myShape1.disableStyle();
}

void draw() {
  // background(255);

  // translate the pixels to where the mouse is
  translate(mouseX, mouseY);

  // rotate the pixels
  rotate(radians(frameCount * 5));

  // draw the shape
  shape(myShape1, -50, -50);
}
```

Console Errors

Arrays

int

float

boolean

color

char

String

```
int[]

float[]

boolean[]

color[]

char[]

String[]
```

```
fibonacci     1, 1, 2, 3, 5, 8, 13, 21
```

```
int[] fibonacci     1, 1, 2, 3, 5, 8, 13, 21
```

```
int[] fibonacci = { 1, 1, 2, 3, 5, 8, 13, 21 };
```

int[]

Stores a list of integers

```
int[] fibonacci = { 1, 1, 2, 3, 5, 8, 13, 21 };
```

Or:

```
int[] fibonacci = new int[8]
fibonacci[0] = 1;
fibonacci[1] = 1;
fibonacci[2] = 2;
fibonacci[3] = 3;
fibonacci[4] = 5;
fibonacci[5] = 8;
fibonacci[6] = 13;
fibonacci[7] = 21;
```

String[]

Stores a list of strings

```
String[] participants = {
    “Lauren”,
    “Thomas”,
    “Susana”,
    “Kees”,
    “Roosje”,
    “Adriaan”,
    “Britt”,
    “Rob”,
    “Dirk”
};
```

Or:

```
String[] participants new String[9];
participants[0] = “Lauren”;
participants[1] = “Thomas”;
participants[2] = “Susana”;
participants[3] = “Kees”;
participants[4] = “Roosje”;
participants[5] = “Adriaan”;
participants[6] = “Britt”;
participants[7] = “Rob”;
participants[8] = “Dirk”;
```

Sketch_20_Arrays_1 | Processing 3.0.2

Java

Sketch_20_Arrays_1

```
// create a variable for a font
PFont font;

void setup() {
  size(500, 500);
  background(0);

  // load a font
  font = createFont("Helvetica", 24);
  textFont(font);
  textAlign(CENTER);

  // populate the array with answers
  answers = new String[20];
  answers[0] = "It is certain";
  answers[1] = "It is decidedly so";
  answers[2] = "Without a doubt";
  answers[3] = "Yes, definitely";
  answers[4] = "You may rely on it";
  answers[5] = "As I see it, yes";
  answers[6] = "Most likely";
  answers[7] = "Outlook good";
  answers[8] = "Yes";
  answers[9] = "Signs point to yes";
  answers[10] = "Reply hazy try again";
  answers[11] = "Ask again later";
  answers[12] = "Better not tell you now";
  answers[13] = "Cannot predict now";
  answers[14] = "Concentrate and ask again";
  answers[15] = "Don't count on it";
  answers[16] = "My reply is no";
  answers[17] = "My sources say no";
  answers[18] = "Outlook not so good";
  answers[19] = "Very doubtful";
}

void draw() {
}

void keyPressed() {
  background(0);
  // choose a random number between 0 and 20
  int answerNum = int(random(0, 20));

  // get the value from that position
  String answer = answers[answerNum];

  // display that value
  text(answer, 250, 250);
}
```

Console Errors