

x	50	61	83	69	71	50	29	31	17	39
	[0]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]

```
int x0 = 50;  
int x1 = 61;  
int x2 = 83;  
int x3 = 69;  
int x4 = 71;  
int x5 = 50;  
int x6 = 29;  
int x7 = 31;  
int x8 = 17;  
int x9 = 39;
```

```
int[] x = { 50, 61, 83, 69, 71,  
            50, 29, 31, 17, 39 };
```

How the pixels look:

0	1	2	3	4
5	6	7	8	9
10	11	12	13	14
15	16	17	18	19
20	21	22	23	24

How the pixels are stored:

0	1	2	3	4	5	6	7	8	9	.	.	.		
---	---	---	---	---	---	---	---	---	---	---	---	---	--	--

		x →				
		0	1	2	3	4
y	0	0	1	2	3	4
	1	5	6	7	8	9
↓	2	10	11	12	13	14
	3	15	16	17	18	19
	4	20	21	22	23	24
		← width = 5 →				

Pixel 13 has an x value of 3 and y value of 2.

$$\begin{aligned}
 &x + (y * \text{width}) \\
 &= 3 + (2 * 5) \\
 &= 3 + 10 \\
 &= 13
 \end{aligned}$$