Ordinal Scales

(*IDVW2*, Ch. 9)

Ordinal scales

```
var ordscale = d3.scaleBand()
    .domain(["cold", "warm", "hot"])
     .range([0, 600]);

> ordscale("cold");
0
> ordscale("warm");
200
> ordscale("hot");
400
```

d3.range( ) .length

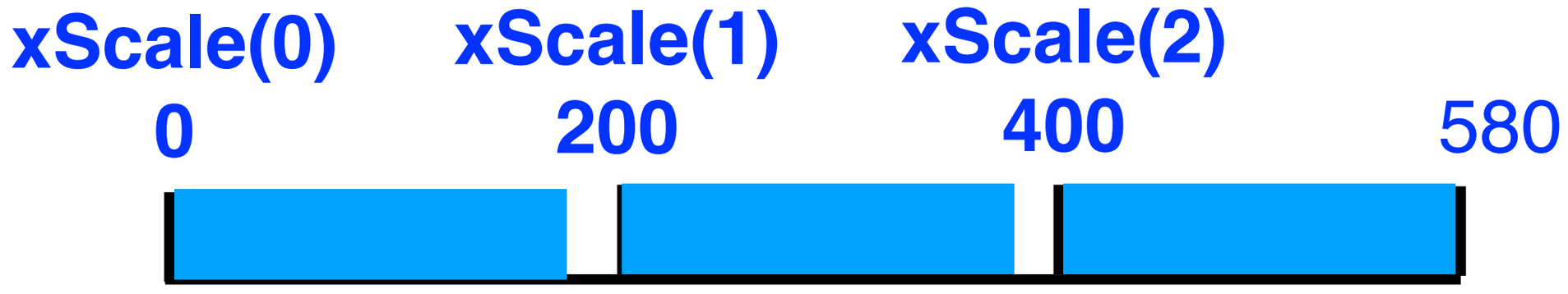
```
var ordscale = d3.scaleBand()
    .domain([0, 1, 2, 3, 4])
     .range([0, 600]);
```

d3.range(5) *returns* **[0, 1, 2, 3, 4]**

```
.domain(d3.range(dataset.length))
```

Ordinal scales

```
var xScale = d3.scaleBand()
    .domain(d3.range(dataset.length))
    .range([0, 580])
    .paddingInner([.1]);
```



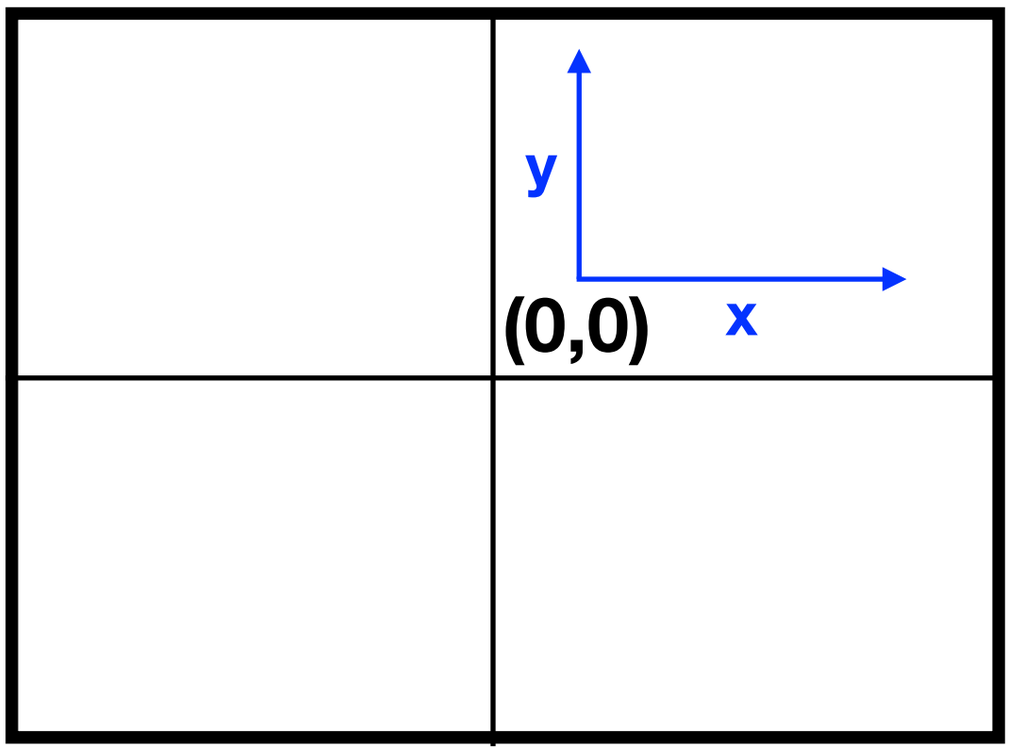

```
> xScale.bandwidth();
  180
```

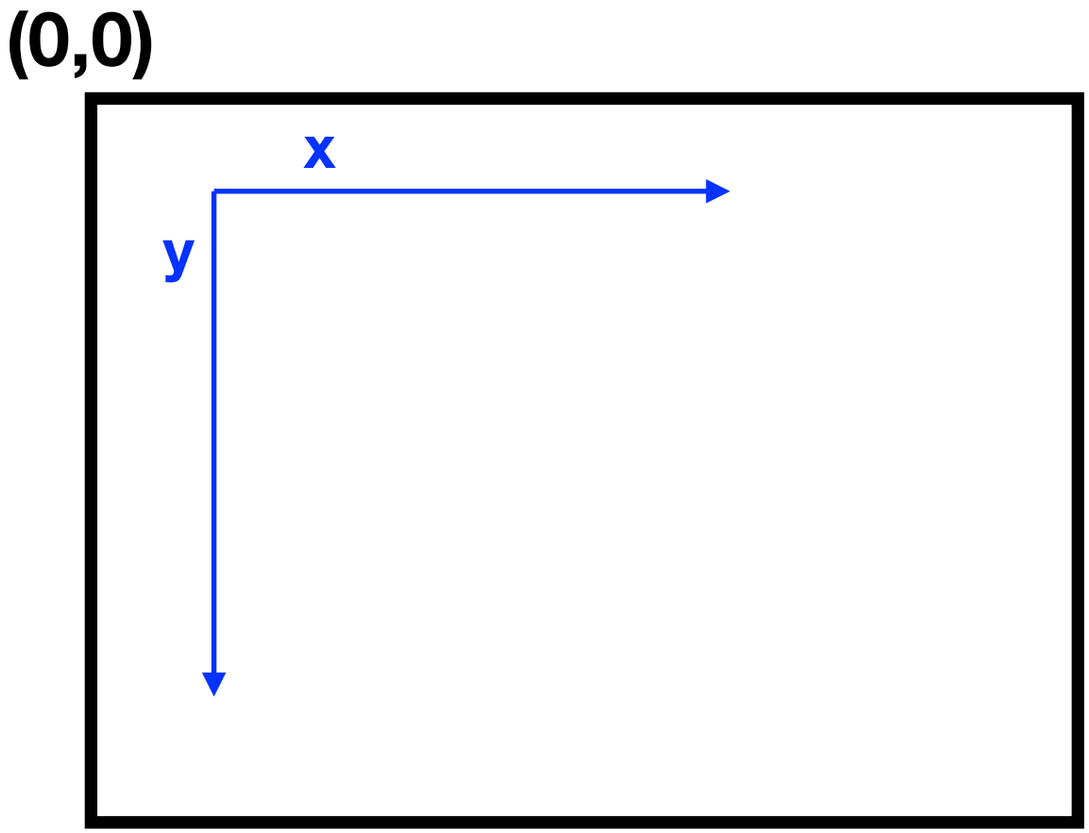
Linear Scales

(*IDVW2*, Ch. 6)

Cartesian Coordinates

SVG





X

Dealing with negative values

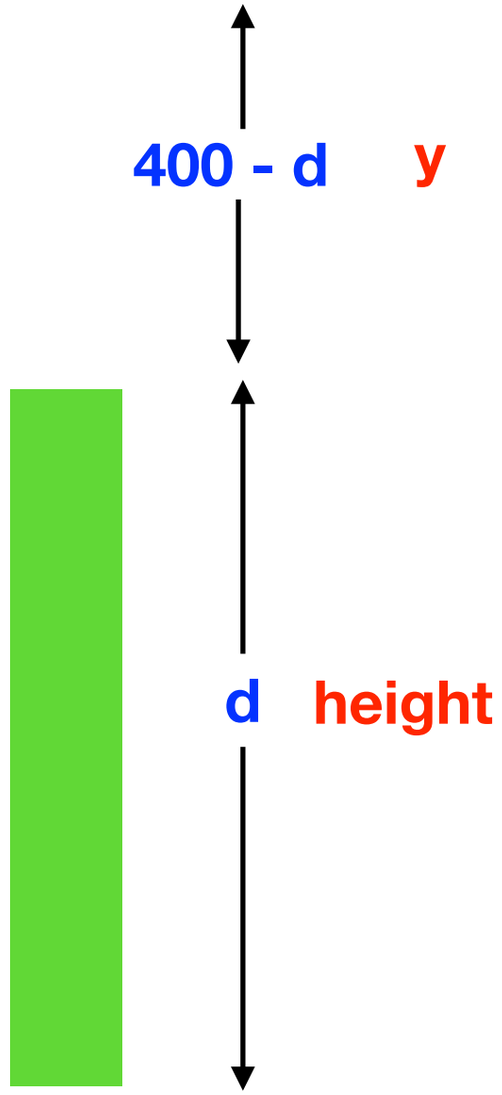
d3.scaleLinear()
.domain([-100, 100])
.range([0, 500])

y

so far...

.attr("height", d => d)

.attr("y", d => 400 - d)

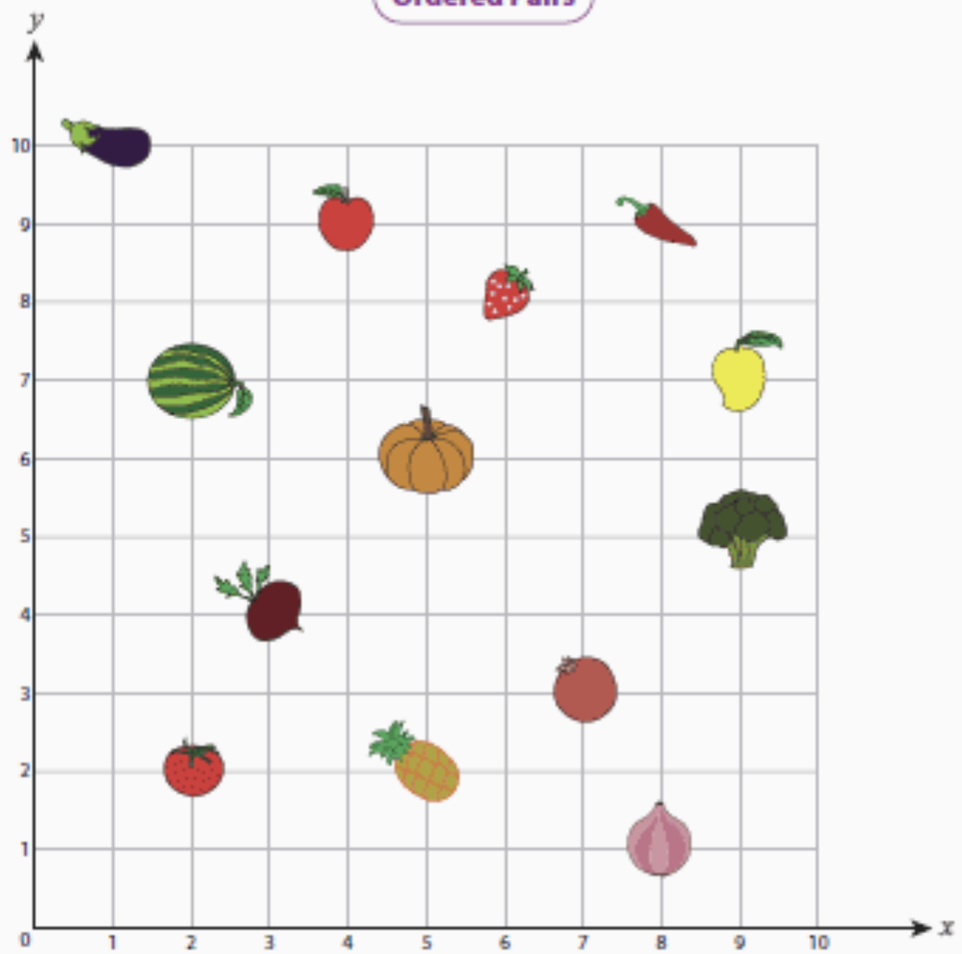


https://www.worldmapstore.com/product/home-decor/usa-upside-down-map/

https://fineartamerica.com/featured/world-map-upside-down-jazzberry-blue.html

Name : _____ Score : _____

Ordered Pairs



A) Write the ordered pair for each item.

1) _____

2) _____

3) _____

4) _____

5) _____

B) Write the item located at each ordered pair.

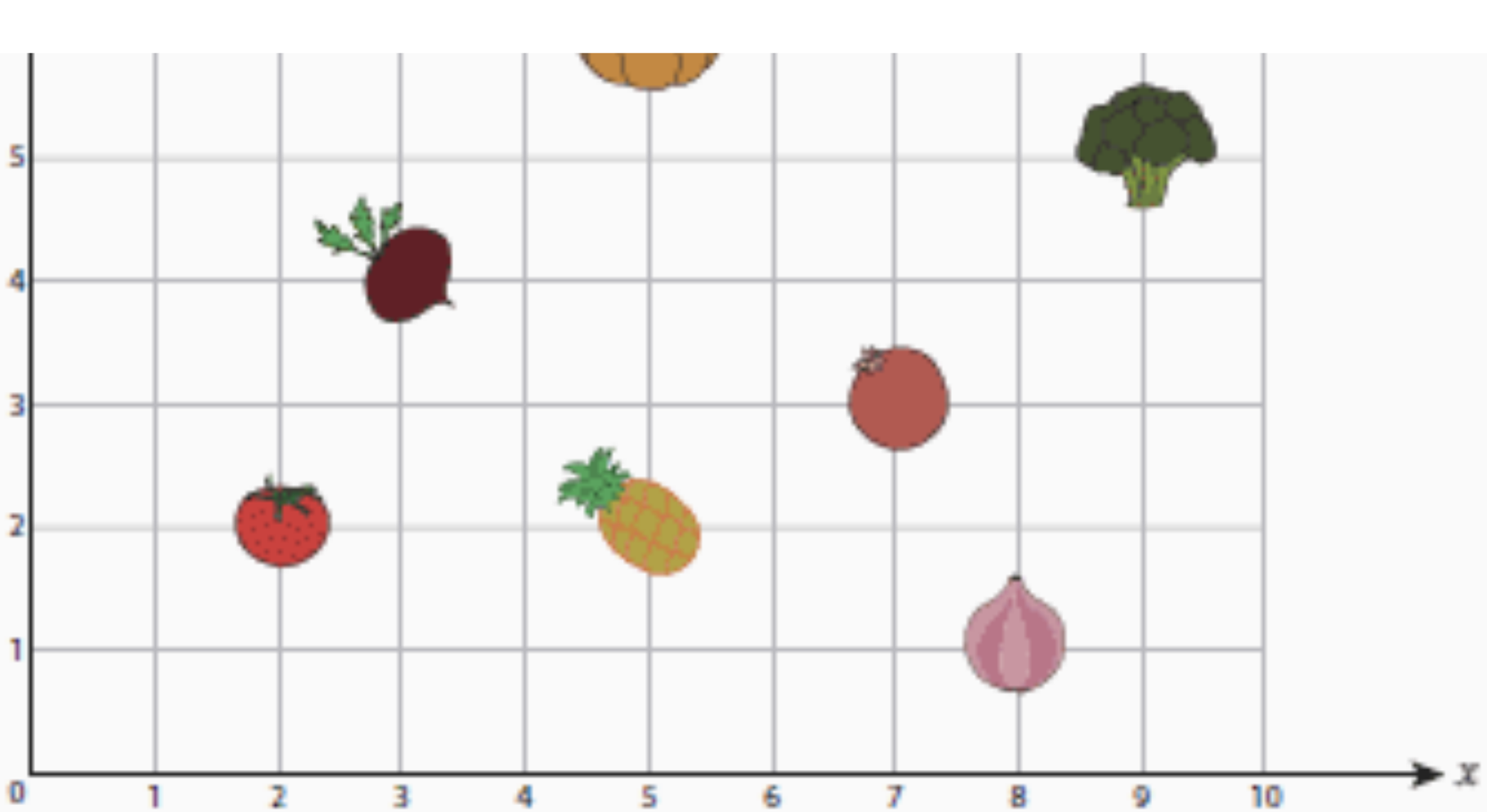
6) (2, 2) _____

7) (9, 7) _____

8) (2, 7) _____

9) (3, 4) _____

10) (7, 3) _____



A) Write the ordered pair for each item.

1)  _____

2)  _____

B) Write the item located at each ordered pair.

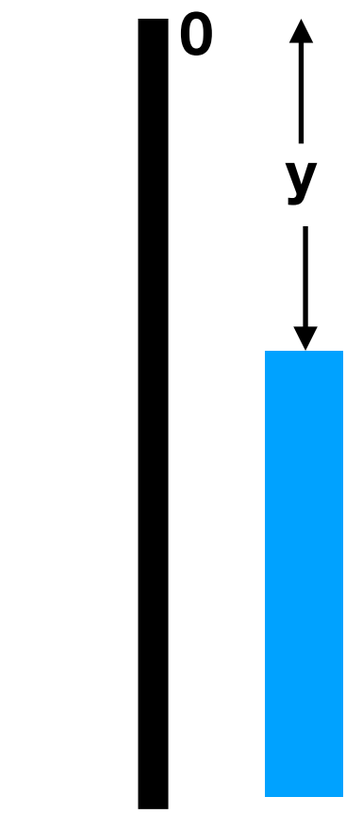
6) (2, 2) _____

7) (9, 7) _____

Scales (one approach, but generally not used)

```
var yScale = d3.scaleLinear()
    .domain([0, datamax])
    .range([0, svgheight]);
```

range



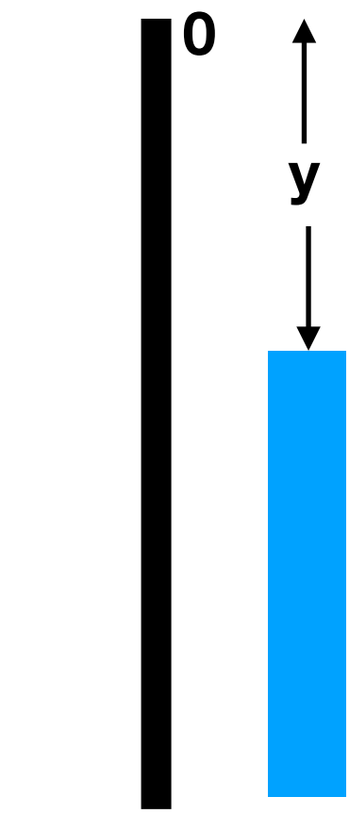

```
.attr("y", d => h - yScale(d));
```

```
.attr("height", d => yScale(d));
```

Scales (approach generally used with axes)

```
var yScale = d3.scaleLinear()
    .domain([0, datamax])
    .range([svgheight, 0]);
```

range




```
.attr("y", d => yScale(d));
```

```
.attr("height", d => h - yScale(d));
```

yScale(datamax) = 0
yScale(0) = svgheight