

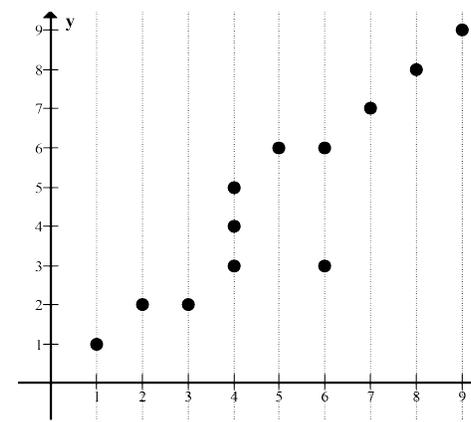
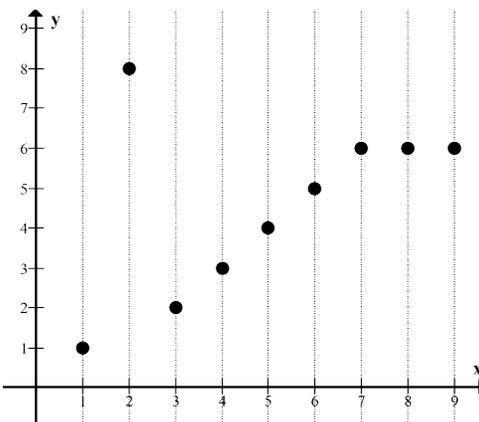
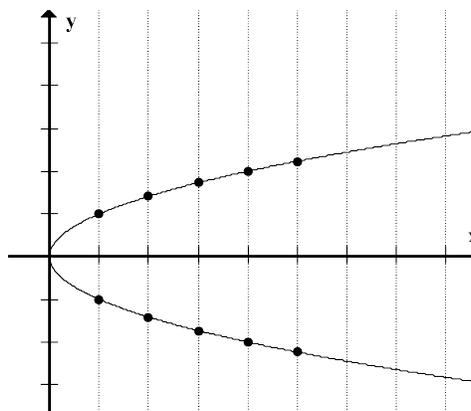
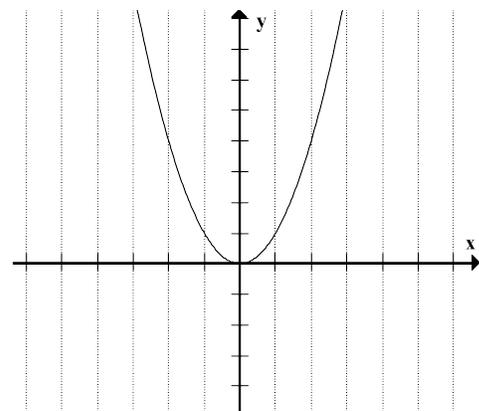
M10 - 6.6 - Function Vertical Line Test Notes

A **Relation** is a **Function** if you only have one y value for every x value.

A **Relation** is **NOT** a **Function** with more than one y value for any x value.

Is a function

Not a function



$(0,1), (1,2), (2,3), (3,3), (4,5)$

$(0,1), (1,2), (1,3), (2,4), (3,5)$

x	y
1	1
2	2
4	3
5	6

Each x value only has one y value

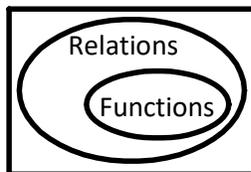
x	y
1	1
2	3
2	5
3	9

An x value with more than one y value

A **Relation** is a **Function** if you run your pencil vertically along the page and only cross the line once.

A **Relation** is a **Function** if you run your pencil vertically along the page and ever hits the line more than once.

Venn Diagram



All Functions are Relations
Not all Relations are Functions