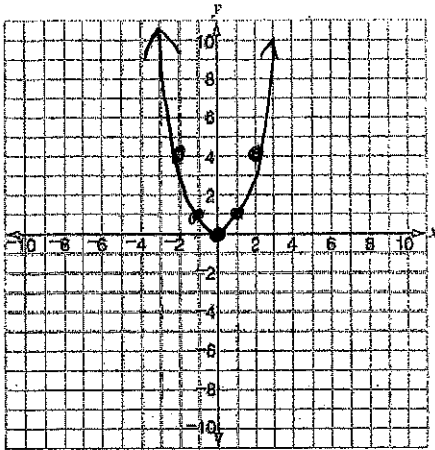


3rd

Warm Up: Complete each table and graph.

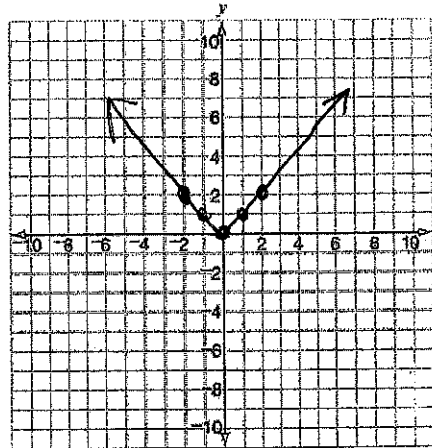
1.  $y = x^2$

x	y
-2	4
-1	1
0	0
1	1
2	4



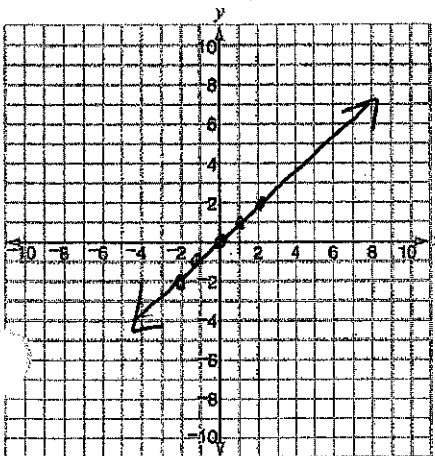
2.  $y = |x|$

x	y
-2	2
-1	1
0	0
1	1
2	2



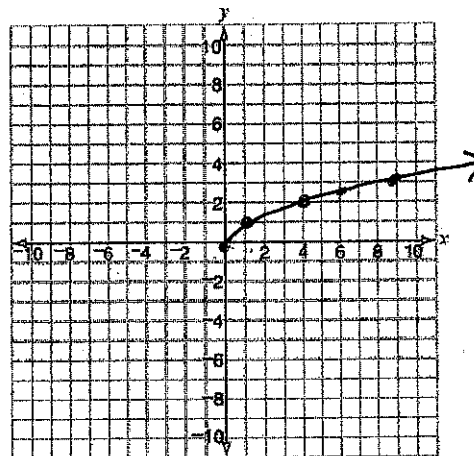
3.  $y = x$

x	y
-2	-2
-1	-1
0	0
1	1
2	2



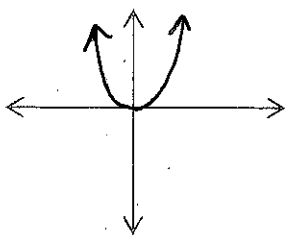
4.  $y = \sqrt{x}$

x	y
0	0
1	1
4	2
9	3

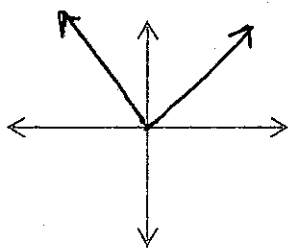


Those 4 curves are definitely worth knowing! See if you can sketch the basic shape of each:

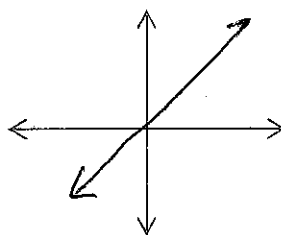
1.  $y = x^2$



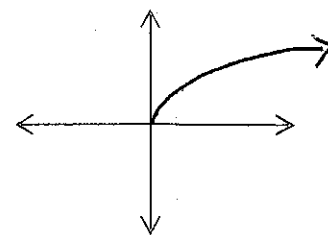
2.  $y = |x|$



3.  $y = x$



4.  $y = \sqrt{x}$



DEFINITION:

A function is a relation in which each element of the domain ( $x$ ) is paired with exactly one element in the range ( $y$ )

Are each of the four equations above a function?

VERTICAL LINE TEST:

Do each of the four graphs pass the VLT?

DEFINITIONS:

**Domain**

**Range**

In the space below each graph write the domain and range.