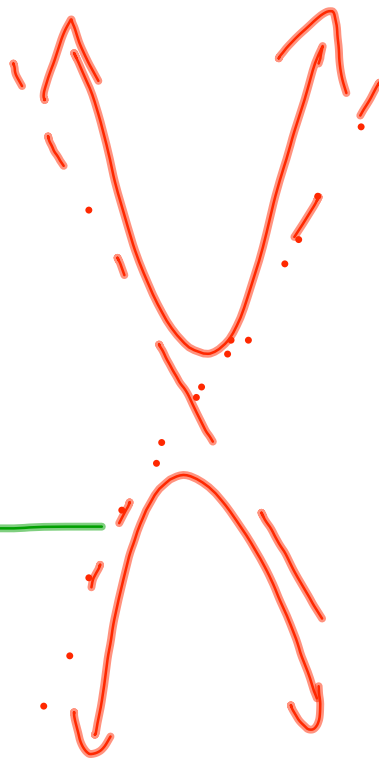


$$y = 4^x$$



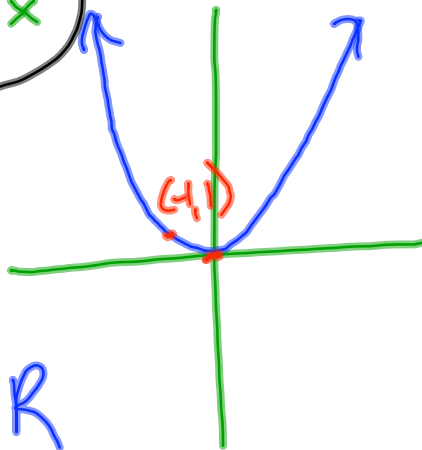
Pure Math 30 Explained

[www.magnathigh.ca](http://www.magnathigh.ca)

# Functions from Math 20

## Quadratic

$$y = x^2$$

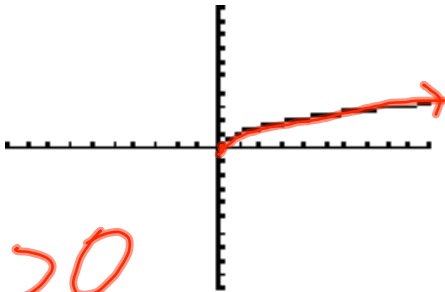


$$D: x \in \mathbb{R}$$

$$R: y \geq 0$$

Square Root (Radical)

$$y = \sqrt{x}$$



$$D: x \geq 0$$

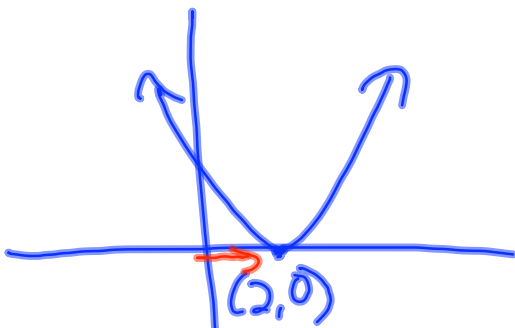
$$R: y \geq 0$$

x	y
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9

x	y
0	0
1	1
4	2
9	3
-16	not defined

Graph

$$y = (x-2)^2$$



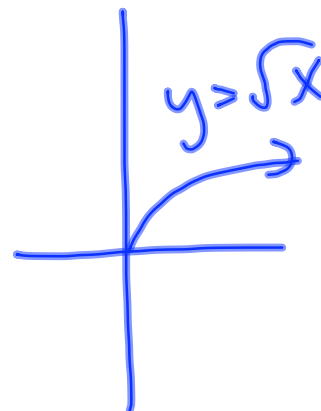
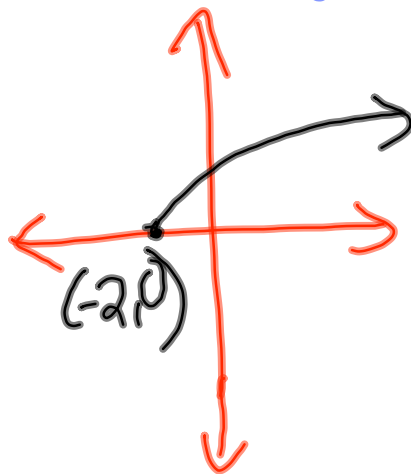
shifted  
right 2  
compared to graph  
of  $y = x^2$

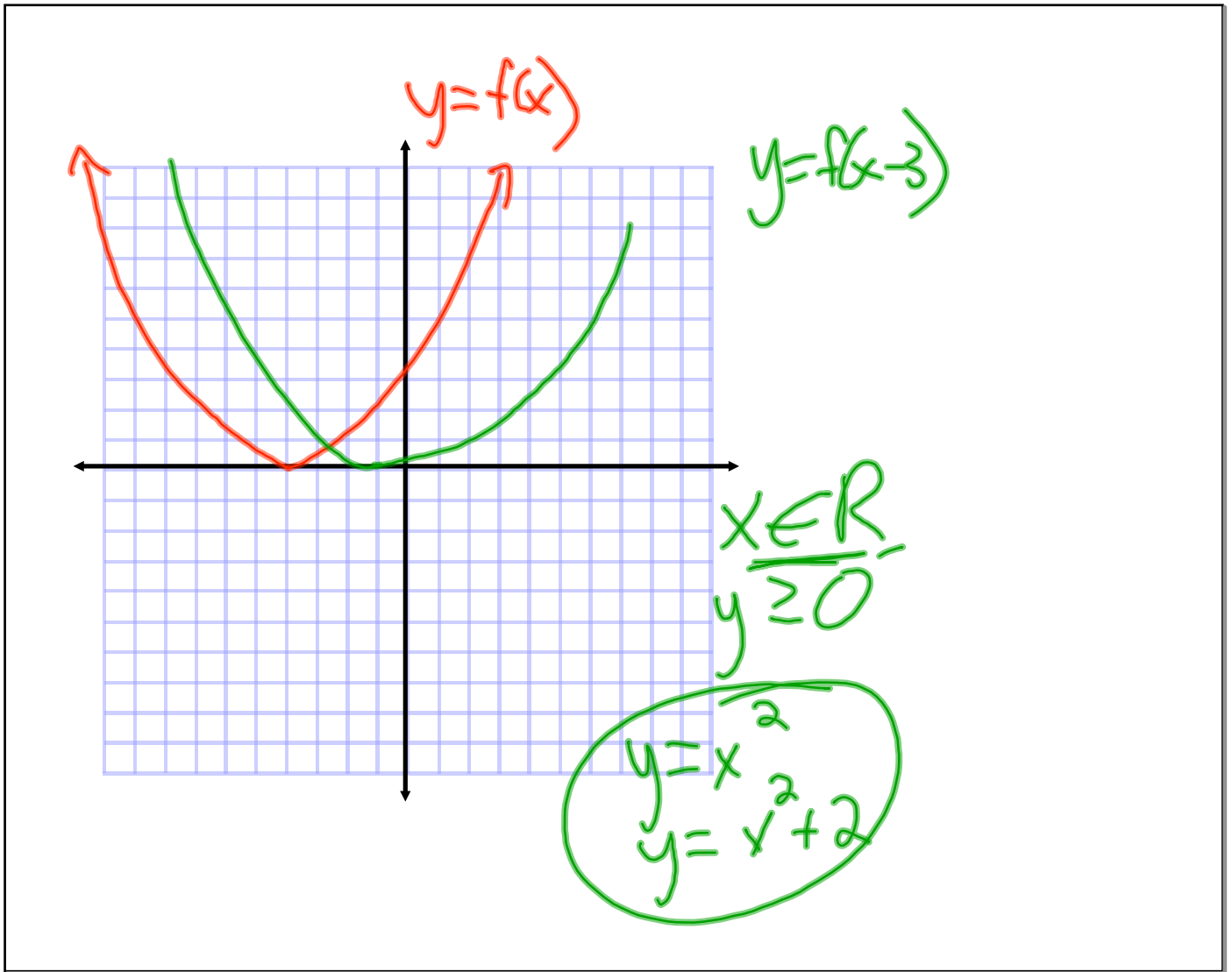


$x$	$y = (x-2)^2$
-3	25
-2	16
-1	9
0	4
1	1
2	0
3	1

$$y = x^2$$

$x$	$y$
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9

Graph  $y = \sqrt{x+2}$ 



$$y = f(x-h)$$

↑  
shifting right x left

$$y = f(x) + k$$

↑  
up or down