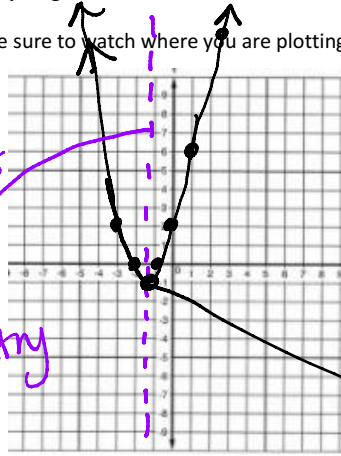


Graph each table on the graph provided. Be sure to watch where you are plotting points.

1)

x	y
-3	2
-2	0
-1	0
0	2
1	6
2	12
3	20

$x = -1.5$
axis of symmetry



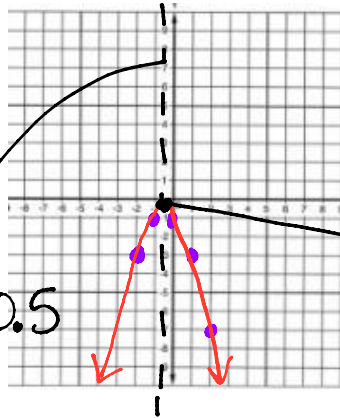
Start plotting the points
Shape - parabola
U shape
Quadratic Functions

Minimum

2)

x	y
-2	-3
-1	-1
0	-1
1	-3
2	-7

axis of symm $x = -0.5$



Flipped over
* Reflect over
x-axis

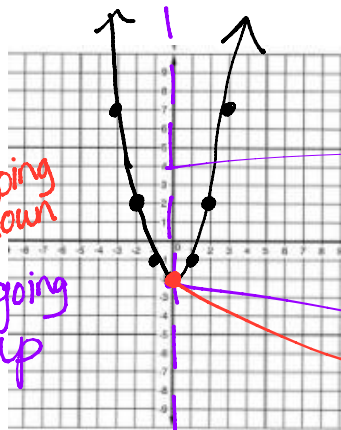
maximum

3)

x	$y = x^2 - 2$
-3	7
-2	2
-1	-1
0	-2
1	-1
2	2
3	7

Vertex

going down
going up



axis of symm
 $x = 0$

Minimum

Vertex
(turning point)
 $(0, -2)$

For these two on the back, you need to plug in the values for x in the equation to get your y values.

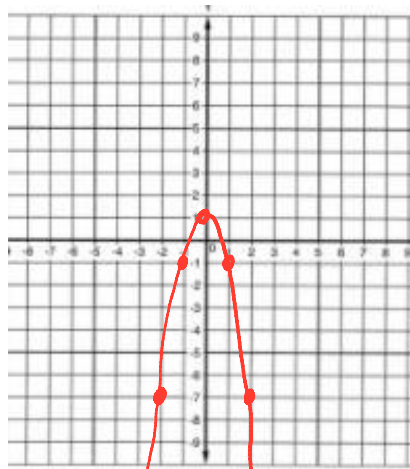
Then you can graph your points.

4)

x	$y = -2x^2 + 1$
-3	-17
-2	-7
-1	-1
0	1
1	-1
2	-7

axis of symm: $x=0$

Vertex (0,1)
Max/Min



$$\begin{aligned} &-2(-3)^2 + 1 \\ &-2(-2)^2 + 1 \\ &-2(-1)^2 + 1 \\ &-2(0)^2 + 1 \\ &-2(1)^2 + 1 \\ &-2(2)^2 + 1 \end{aligned}$$

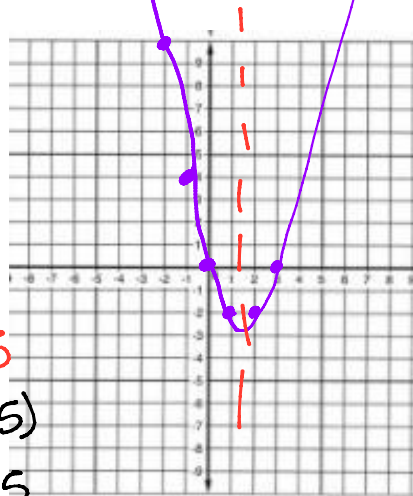
* Reflected over x-axis

5)

x	$y = x^2 - 3x$
-3	18
-2	10
-1	4
0	0
1	-2
2	-2
3	0

Vertex

axis of symm: $x=1.5$
Min: Vertex (1.5, -2.25)
 $(1.5)^2 - 3(1.5) = -2.25$



$$\begin{aligned} &(-3)^2 - 3(-3) \\ &(-2)^2 - 3(-2) \\ &(-1)^2 - 3(-1) \\ &(0)^2 - 3(0) \\ &(1)^2 - 3(1) \\ &(2)^2 - 3(2) \\ &(3)^2 - 3(3) \end{aligned}$$