

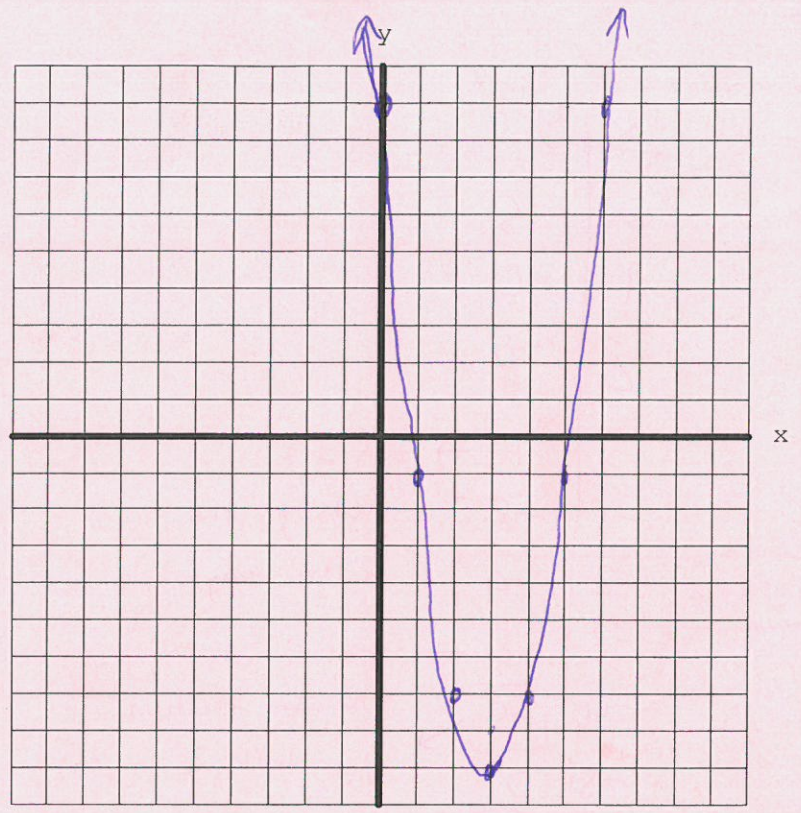
Graph each quadratic with a table of values

1.  $y = 2x^2 - 12x + 9$

x	y
0	9
1	-1
2	-7
3	-9
4	-7
5	-1
6	9

Vertex 3 -9

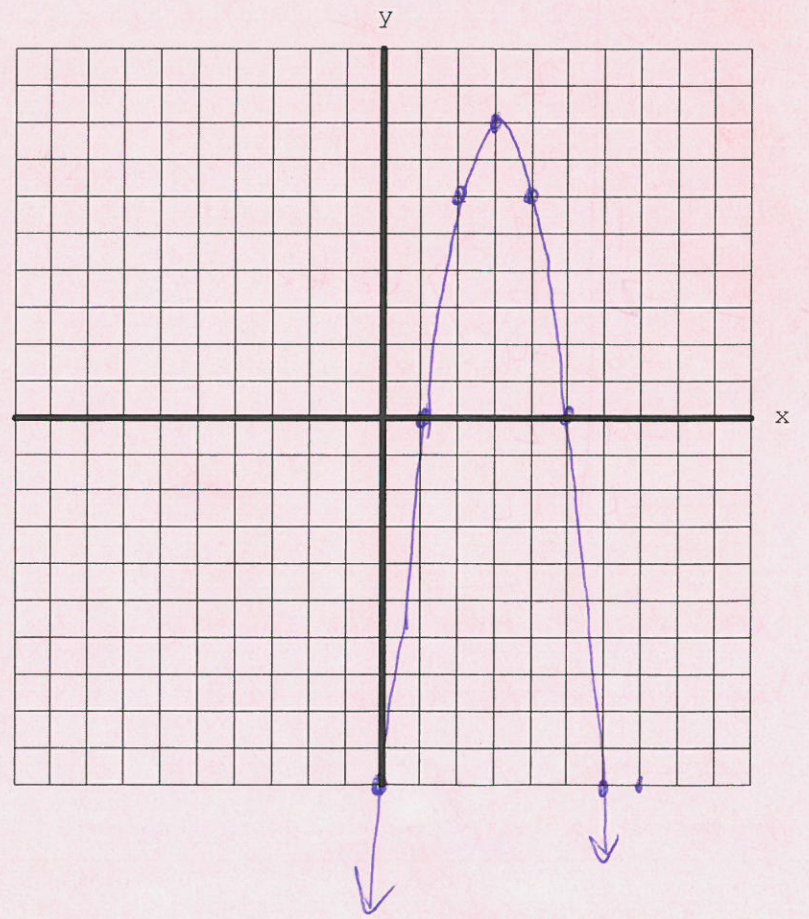
Cool!  
we found  
the vertex  
by luck!



2.  $y = -2x^2 + 12x - 10$

x	y
0	-10
1	0
2	6
3	8
4	6
5	0
6	-10

Where is it  
on this table?

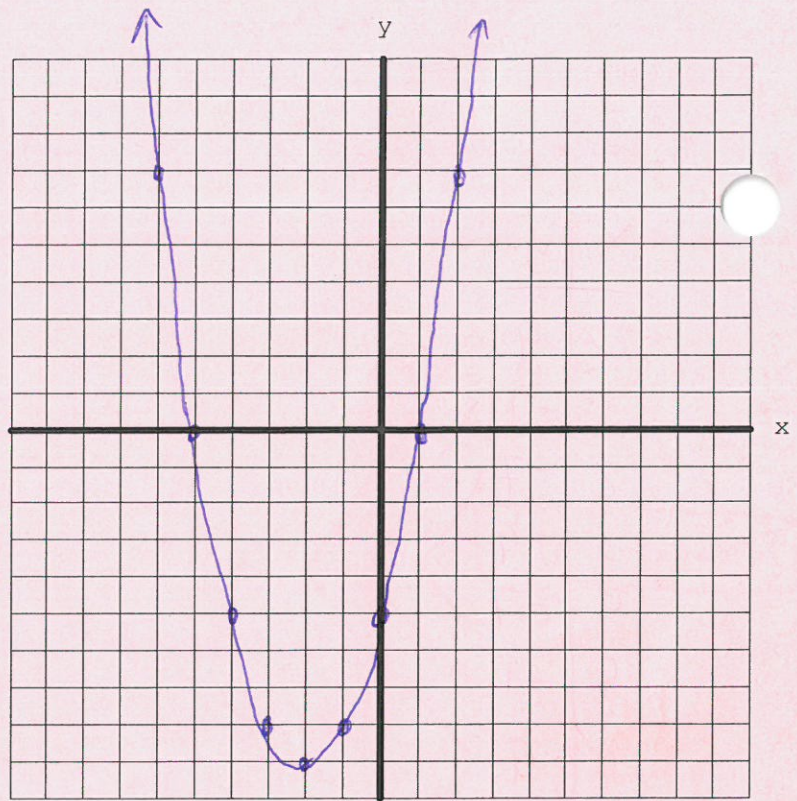




3.  $y = x^2 + 4x - 5$

x	y
0	-5
1	0
2	7
3	16
-1	-8
<b>vertex</b> -2	<b>-9</b>
-3	-8
-4	<b>-5</b>
-5	0
-6	<b>7</b>

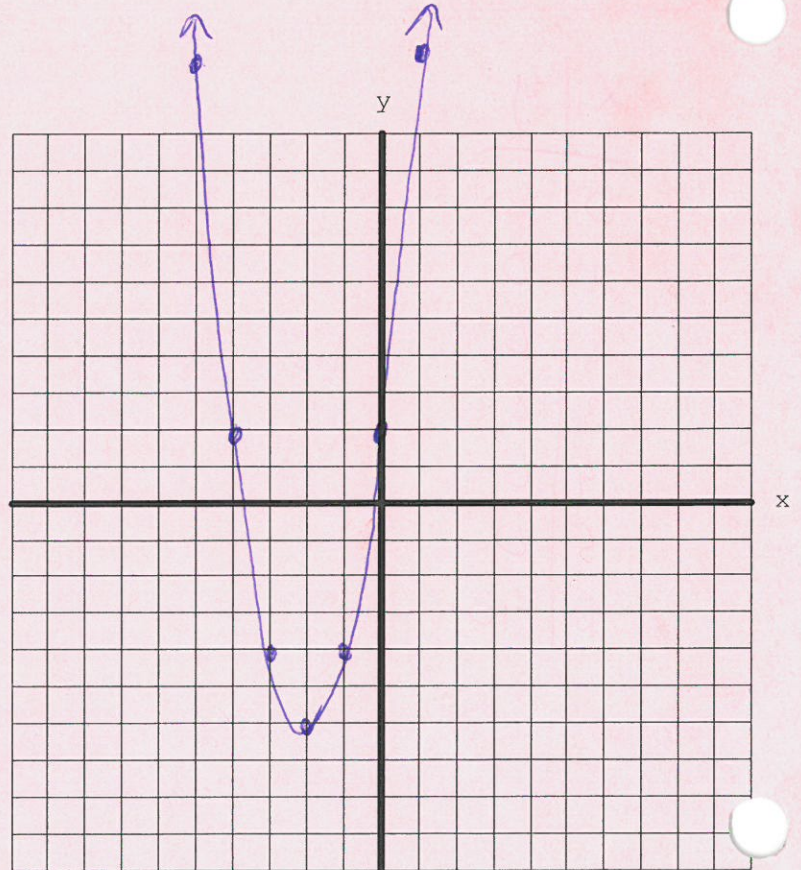
uh oh...  
 let's go the other way  
 yeah... we made the turn!  
 you tell me



4.  $y = 2x^2 + 8x + 2$

x	y
0	2
1	12
2	26
-1	-4
<del>-2</del>	-6
-3	-4
-4	2
-5	12

} vertex



We didn't find the vertex by luck this time. We had to realize we were going the wrong way and try some negative x's. Wouldn't it be nice to have a rule?