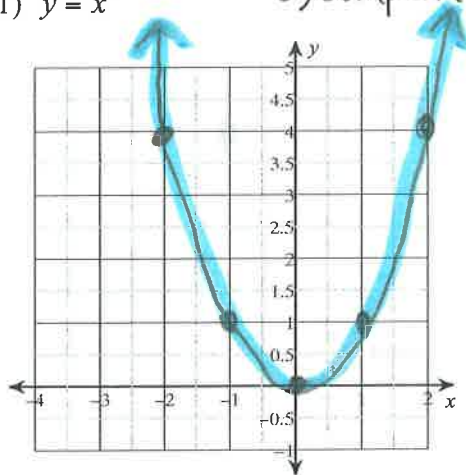


9.1 & 9.2 Quiz Review

#1-2

Sketch the graph of each function.

1) $y = x^2$



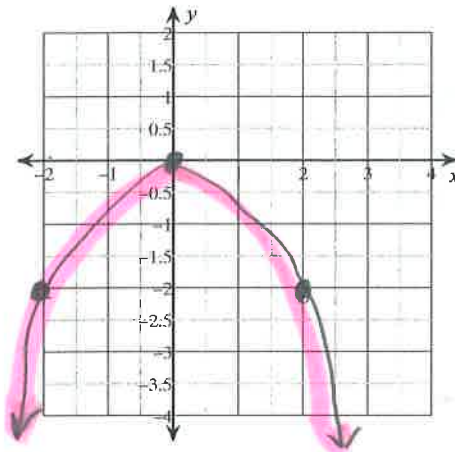
x	y
-4	16
-3	9
-2	4
-1	1
0	0
1	1
2	4
3	9
4	16

A) $x = 0$

B) $(0, 0)$

For each problem, A) identify the line of symmetry as an equation, B) identify the vertex, C) complete the table with 4 ordered pairs & D) graph the function.

2) $y = -\frac{1}{2}x^2$

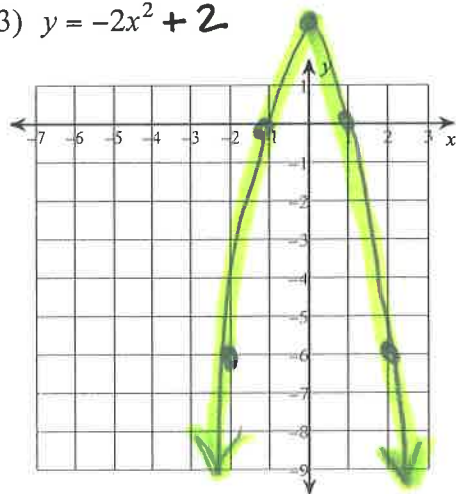


x	y
4	-8
2	-2
0	0
-2	-2
-4	-8

A) $x = 0$

B) $(0, 0)$

3) $y = -2x^2 + 2$

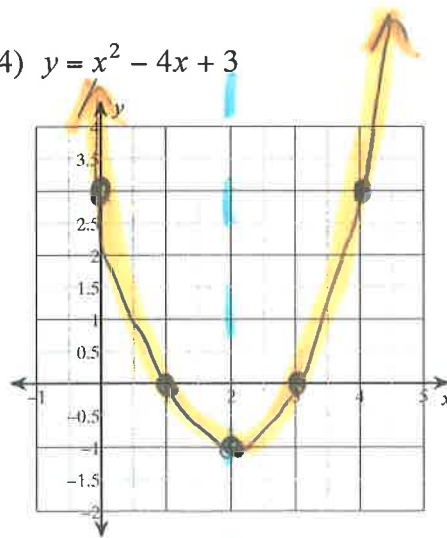


x	y
-4	-30
-3	-16
-2	-6
-1	0
0	2
1	0
2	-6
3	-16
4	-30

A) $x = 0$

B) $(0, 2)$

4) $y = x^2 - 4x + 3$



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

A) $x = 2$

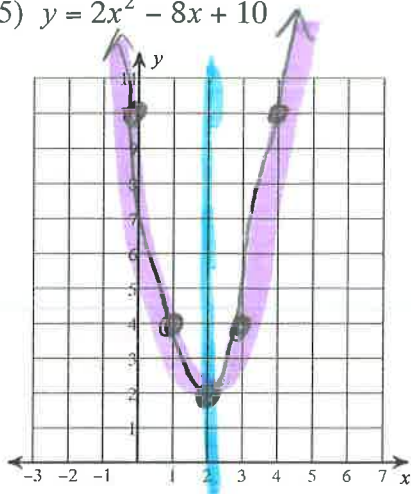
B) $(2, -1)$

$x = \frac{-b}{2a}$

$x = \frac{4}{2(1)}$

$x = 2$

5) $y = 2x^2 - 8x + 10$



x	y
-1	20
0	10
1	4
2	2
3	4
4	10
5	20

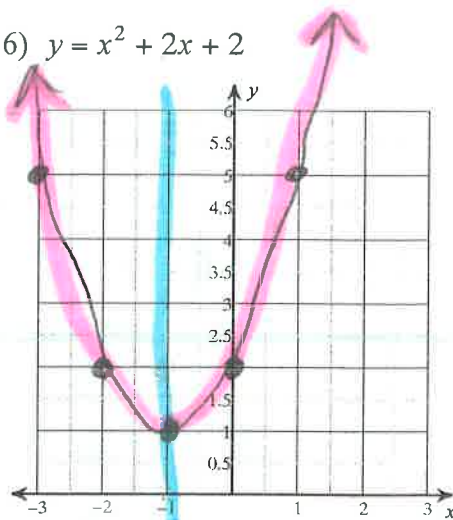
A) $x = 2$

$x = \frac{-b}{2a} = \frac{8}{4} = 2$

B) $(2, 2)$

$x = \frac{8}{2(2)} = 2$

6) $y = x^2 + 2x + 2$



x	y
-4	16
-3	5
-2	2
-1	1
0	2
1	5
2	10

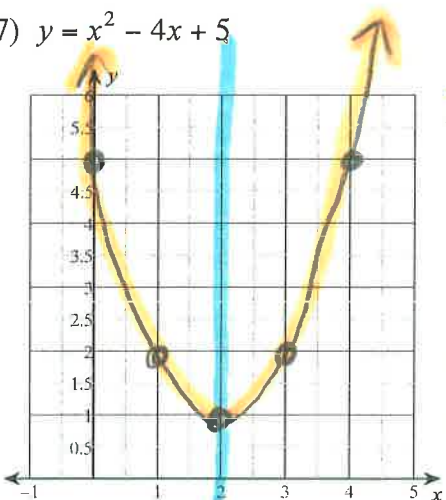
A) $x = -1$

$x = \frac{-b}{2a} = \frac{-2}{2(1)} = -1$

B) $(-1, 1)$

$x = \frac{-2}{2(1)} = -1$

7) $y = x^2 - 4x + 5$



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

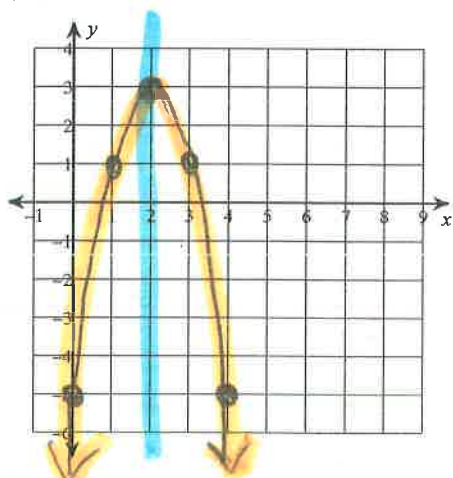
A) $x = 2$

$x = \frac{-b}{2a} = \frac{4}{2} = 2$

B) $(2, 1)$

$x = \frac{-(-4)}{2(1)} = 2$

8) $y = -2x^2 + 8x - 5$



x	y
-1	-15
0	-5
1	1
2	3
3	1
4	-5
5	-15

A) $x = 2$

$x = \frac{-b}{2a} = \frac{-8}{-4} = 2$

B) $(2, 3)$

$x = \frac{-8}{2(-2)} = 2$

#9-12 Order each group of quadratic functions from widest to narrowest graph.

9. $y = 3x^2, y = 2x^2, y = 4x^2$

11. $f(x) = 5x^2, f(x) = -3x^2, f(x) = x^2$

$2x^2, 3x^2, 4x^2$

$x^2, -3x^2, 5x^2$

10. $y = -\frac{1}{2}x^2, y = 5x^2, y = -\frac{1}{4}x^2$

12. $f(x) = -2x^2, f(x) = -\frac{2}{3}x^2, f(x) = -4x^2$

$-\frac{1}{4}x^2, -\frac{1}{2}x^2, 5x^2$

$-\frac{2}{3}x^2, -2x^2, -4x^2$