SM2 7A Quadratic test Review Answers

	Direction of Opening	Vertex	y-intercept	Zeros	Letter of Correct Graph
1. $y=(x+2)^2-9$	Up	(-2, -9)			F
2. $y=-(x-2)^2+9$	Down	(2, 9)			B
3. $y=-(x-1)(x-5)$	Down			X=1, 5	C
4. $y=-(x+1)(x+5)$	Down			X=-1, -5	D
5. $y=x^2-8x+7$	Up	X=8/(2*1)= 4	(0, 7)		A
6. $y=x^2+8x+7$	up	X=-8/(2*1)= -4	(0, 7)		E

7. V: (-3, -7)
   y-int: (0, 11)
8. V: (6, 3)
   y-int: (0, -33)
9. V: (-3, -5)
   y-int: (0, -3.2)
10. a = 1, b = -6, c = 4
    Form: Standard
    Opens: UP
    V: (3, -5)
    AofS: x = 3
    Min
    Min value: y = -5
    y-int: (0, 4)
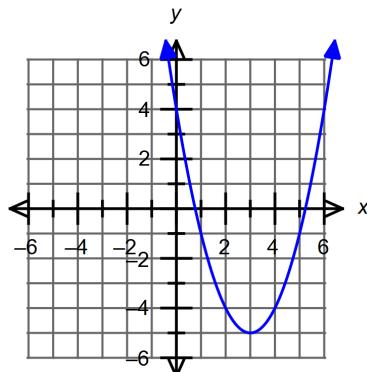
11. a = -2, h = -2, k = 5
    Form: Vertex
    Opens: down
    V: (-2, 5)
    AofS: x =-2
    Max
    Mia value: y = 5
    y-int: (0, -3)
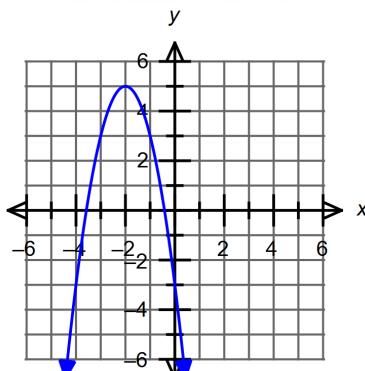
12. a = ½, p = 2, q = 6
    Form: Factored
   Opens: up
    Zeros: x = 2, 6
    V: (4, -2)
    AofS: x =-2
    y-int: (0, 6)
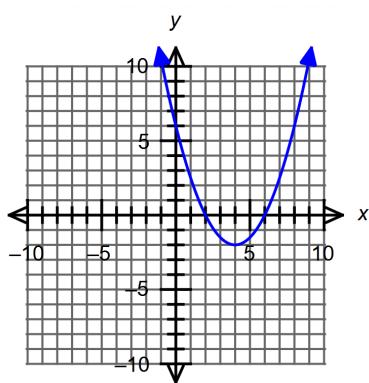
13. Standard
    Zeros: x = 3, 7
    X=intercepts: (3, 0) & (7, 0)

14. Factored
    Zeros: x = 0, -7
    X=intercepts: (0, 0) & (-7, 0)

15. Standard
    Zeros: $x = 1 + 3\sqrt{2}, \ 1 - 3\sqrt{2}$
    X=intercepts: (5.24, 0) & (-3.24, 0)

16. Vertex
    Zeros: $x = 2 + 5i, \quad 2 - 5i$
    X=intercepts: none

C. Axis of Symmetry (What is it?)
I. Equation of the Axis of Symmetry
G. Factored Form of a Quadratic Function
E. Maximum Point
B. Minimum Point
K. $\dfrac{-b}{2a}$
J. Quadratic Function
F. Roots
A. Standard Form of a Quadratic Function
H. Vertex
D. Vertex Form of a Quadratic Function
F. x-Intercepts
F. Zeros