

Question:	$y = -3x^2$	$y = 2(x-3)^2 + 1$	$y = -(1/3)x^2 + 3$
1. Value of “a”	-3	2	-1/3
2. Value of “p”	0	3	0
3. Value of “q”	0	1	3
4. Wide Narrow normal	narrow	narrow	wide
5. Opens up or down	down	up	down
6. Max or min value	max	min	max
7. What is the max/min value?	$Y = 0$	$Y = 1$	$Y = 3$
8. Equation of axis of symmetry	$X = 0$	$X = 3$	$X = 0$
9. Coordinates of vertex	(0, 0)	(3, 1)	(0, 3)
10. Range	$y \leq 0$	$y \geq 1$	$y \leq 3$
11. Domain	$x \in \mathbb{R}$	$x \in \mathbb{R}$	$x \in \mathbb{R}$
12. Y-intercept	$Y = 0$	$Y = 19$	$Y = 3$

Question:	$y = -4x^2 - 5$	$y = -2(x-2)^2 + 3$	$y = -(2/5)x^2 + 2$
1. Value of “a”	-4	-2	-2/5
2. Value of “p”	0	2	0
3. Value of “q”	-5	3	2
4. Wide Narrow normal	narrow	narrow	wide
5. Opens up or down	down	down	down
6. Max or min value	max	max	max
7. What is the max/min value?	$Y = -5$	$Y = 3$	$Y = 2$
8. Equation of axis of symmetry	$X = 0$	$X = 2$	$X = 0$
9. Coordinates of vertex	(0, -5)	(2, 3)	(0, 2)
10. Range	$y \leq -5$	$y \leq 3$	$y \leq 2$
11. Domain	$x \in \mathbb{R}$	$x \in \mathbb{R}$	$x \in \mathbb{R}$
12. Y-intercept	$Y = -5$	$Y = -5$	$Y = 2$

Question:	$y = 3x^2 - 1$	$y = -3(x+1)^2 - 7$	$y = -(x+1)^2$
1. Value of “a”	3	-3	-1
2. Value of “p”	0	-1	-1
3. Value of “q”	-1	-7	0
4. Wide Narrow normal	narrow	narrow	normal
5. Opens up or down	up	down	down
6. Max or min value	min	max	max
7. What is the max/min value?	$Y = -1$	$Y = -7$	$Y = 0$
8. Equation of axis of symmetry	$X = 0$	$X = -1$	$X = -1$
9. Coordinates of vertex	(0, -1)	(-1, -7)	(-1, 0)
10. Range	$y \geq -1$	$y \leq -7$	$y \leq 0$
11. Domain	$x \in \mathbb{R}$	$x \in \mathbb{R}$	$x \in \mathbb{R}$
12. Y-intercept	-1	-10	-1