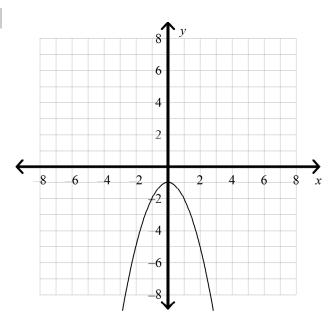
## **Exit Ticket: Quadratic Graphs and Their Properties**

What are the coordinates of the vertex of the graph or table? Is it a maximum or minimum?

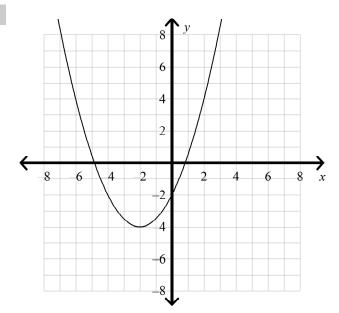
1



- $\bigcirc$  (-1, 0); maximum
- B (-1, 0); minimum

- $\bigcirc$  (0, -1); maximum
- $\bigcirc$  (0, -1); minimum

2



- $\bigcirc$  (-4, -2); minimum
- B (-2, -4); maximum

- $\bigcirc$  (-2, -4); minimum
- ① (-4, -2); maximum

Name: \_\_\_\_\_

ID: A

3

·	
X	Y
0	1
-1	-2
-2	-3
-3	-2
-4	1

(A) (-4, 1); minimum

(-2, -3); minimum

 $\bigcirc$  (-2, -3); maximum

(1, 0); maximum

Order the group of quadratic functions from widest to narrowest graph.

4  $y = -4x^2$ ,  $y = -3x^2$ ,  $y = -5x^2$ 

$$y = -3x^2$$
,  $y = -5x^2$ ,  $y = -4x^2$ 

**B** 
$$y = -5x^2$$
,  $y = -4x^2$ ,  $y = -3x^2$ 

$$\bigcirc$$
  $y = -3x^2, y = -4x^2, y = -5x^2$ 

① 
$$y = -4x^2$$
,  $y = -3x^2$ ,  $y = -5x^2$ 

5  $y = \frac{1}{4}x^2, y = -\frac{1}{2}x^2, y = \frac{3}{2}x^2$ 

**B** 
$$y = -\frac{1}{2}x^2$$
,  $y = \frac{1}{4}x^2$ ,  $y = \frac{3}{2}x^2$ 

© 
$$y = \frac{1}{4}x^2$$
,  $y = -\frac{1}{2}x^2$ ,  $y = \frac{3}{2}x^2$ 

① 
$$y = \frac{3}{2}x^2, y = -\frac{1}{2}x^2, y = \frac{1}{4}x^2$$

6 How is the graph of  $y = 3x^2 + 3$  different from the graph of  $y = 3x^2$ ?

(a) It is shifted 3 unit(s) up.

- © It is shifted 3 unit(s) left.
- B It is shifted 3 unit(s) down.
- ① It is shifted 3 unit(s) right.

7 How is the graph of  $y = -4x^2 - 5$  different from the graph of  $y = -4x^2$ ?

- (A) It is shifted 5 unit(s) right.
- © It is shifted 5 unit(s) up.
- **B** It is shifted 5 unit(s) left.
- ① It is shifted 5 unit(s) down.

## **Exit Ticket: Quadratic Graphs and Their Properties Answer Section**

- 1 C
- **2** C
- **3** B
- **4** C
- **5** C
- 6 A
- **7** D