Algebra I Practice F.BF.B.3: Graphing Quadratic Functions 1 www.jmap.org

1. Which of the quadratic functions has the narrowest graph?

[A]
$$y = -0.8x^2$$
 [B] $y = -8x^2$
[C] $y = 7x^2$ [D] $y = \frac{2}{9}x^2$
[1]

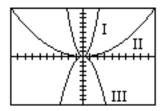
2. Which of the quadratic functions has the widest graph?

[A]
$$y = \frac{1}{6}x^{2}$$
 [B] $y = 4x^{2}$
[C] $y = \frac{1}{5}x^{2}$ [D] $y = -0.6x^{2}$
[2]

- 3. Test for symmetry with respect to the axes. $y = -x^2$
 - [A] The graph is symmetric with respect to the *x* and *y*-axes.
 - [B] The graph is symmetric with respect to the *y*-axis.
 - [C] The graph is symmetric with respect to the *x*-axis.
 - [D] The graph is *not* symmetric with respect to the *x* or *y*-axes.

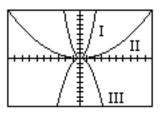


4. The graphs are of equations of the form $y = ax^2$. Which graph(s) shown below make the statement "|a| has the least value" true?



[A] III only[B] II only[C] I only[D] I and III[E] II and III

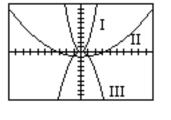
- [4]
- 5. The graphs are of equations of the form $y = ax^2$. Which graph(s) shown below make the statement "a < 0" true?



[A] III only	[B] I only	[C] I and III
[D] II only	[E] II and III	

[5]

6. The graphs are of equations of the form $y = ax^2 + c$. Which graph(s) shown below make the statement "c < 0" true?



[A] I and III[B] I only[C] I and II[D] II only[E] III only

- [1] <u>B</u>
- [2] <u>A</u>
- [3] <u>B</u>
- [4] <u>B</u>_____
- [5] <u>A</u>_____
- [6] D