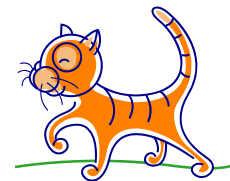


Transformations with Functions

Name _____

For each equation below, complete the following.

- Sketch a graph
- State the vertex
- State the orientation (does it open up or open down?)
- State transformation from parent function (either $y = x^2$ or $y = |x|$)



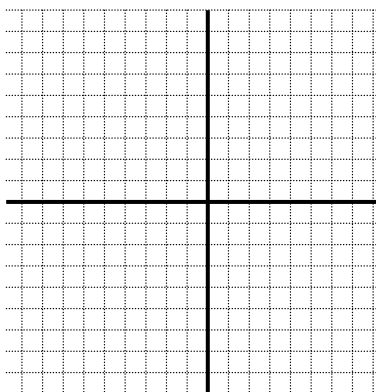
1. $y = (x + 3)^2$

b)

c)

d)

Graph:



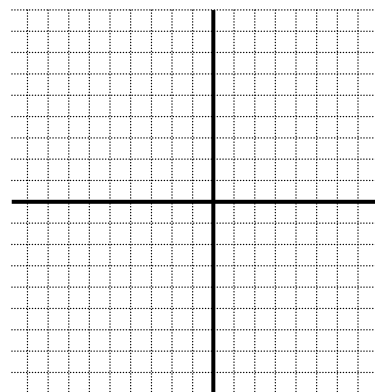
2. $y = x^2 + 7$

b)

c)

d)

Graph:



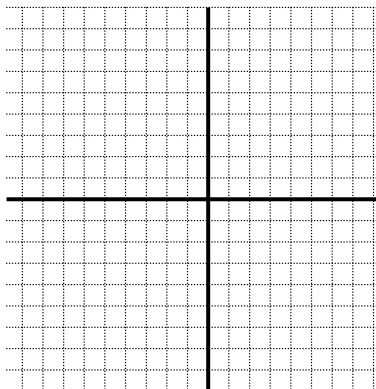
3. $y = 3x^2 - 2$

b)

c)

d)

Graph:



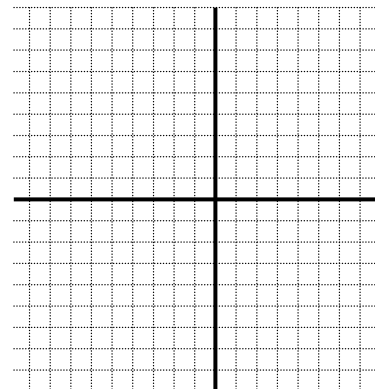
4. $y = \frac{1}{3}(x - 1)^2 + 3$

b)

c)

d)

Graph:



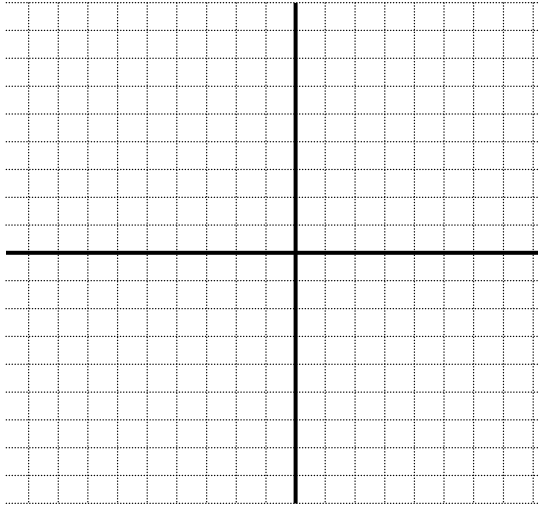
5. $y = |x|$

b)

c)

d)

Graph:



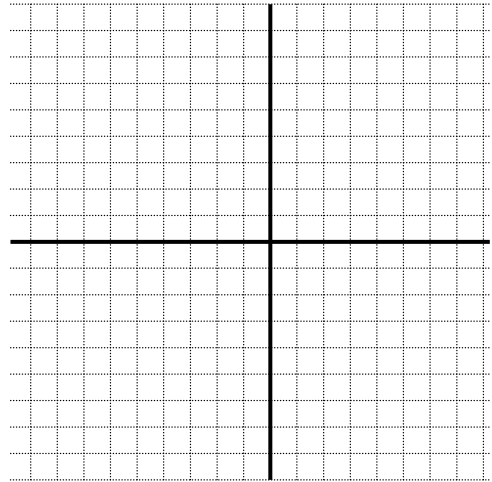
6. $y = |x + 1|$

b)

c)

d)

Graph:



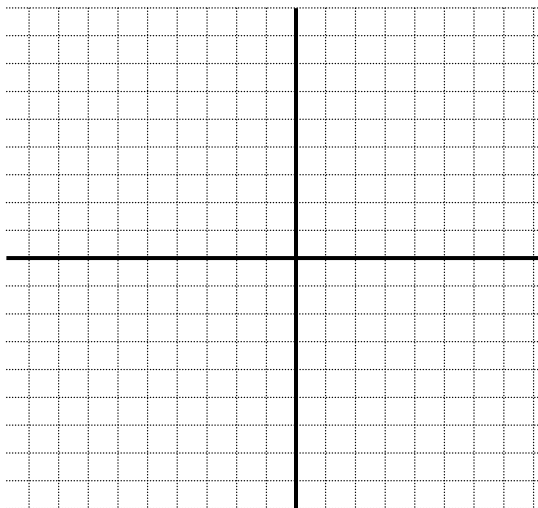
7. $y = \frac{1}{4} \cdot |x|$

b)

c)

d)

Graph:



8. $y = -2 \cdot |x - 2| + 1$

b)

c)

d)

Graph:

