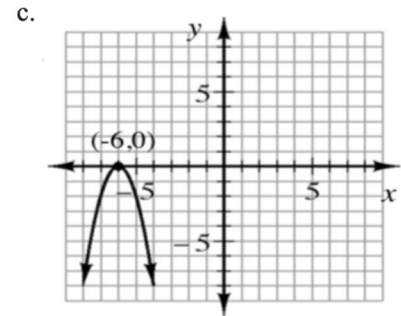
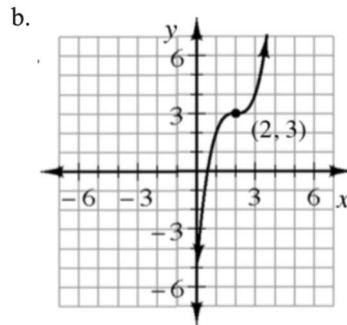
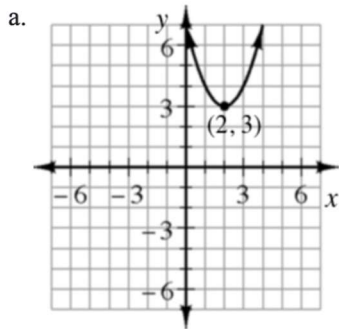


Practice 2.2.2**Remember to show your work!**

2-56. Use the point $(2, k)$ to help you write a possible equation for each graph shown below.

Determine the domain and range for each function.



Equation: _____

Equation: _____

Equation: _____

Domain: _____

Domain: _____

Domain: _____

Range: _____

Range: _____

Range: _____

2-59. Solve the following systems of equations. In other words, what values of a and b make each system true? Be sure to show your work or explain your thinking clearly.

a. $2 = a \cdot b^0$
 $\frac{1}{2} = a \cdot b^2$

b. $\frac{1}{2} = a \cdot b^0$
 $2 = a \cdot b^2$

2-60. Match each expression on the left with its equivalent expression on the right. Assume that all variables represent positive values. Be sure to justify how you know each pair is equivalent.

1. $2x\sqrt{y}$

2. $2y\sqrt{2x}$

3. $2xy^2$

4. $2x\sqrt{2y}$

5. $4y\sqrt{x}$

a. $\sqrt{4x^2y^4}$

b. $\sqrt{8x^2y}$

c. $\sqrt{4x^2y}$

d. $\sqrt{16xy^2}$

e. $\sqrt{8xy^2}$

2-61. Use the definition of i to rewrite each of the following expressions.

a. $\sqrt{-25}$

b. $\sqrt{-32}$

c. $(3 + 2i)(5 - 3i)$

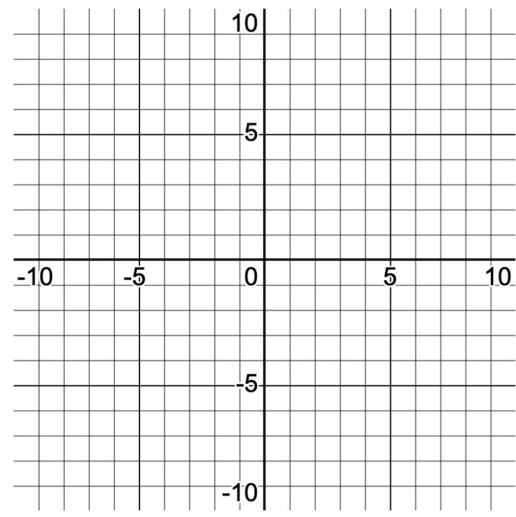
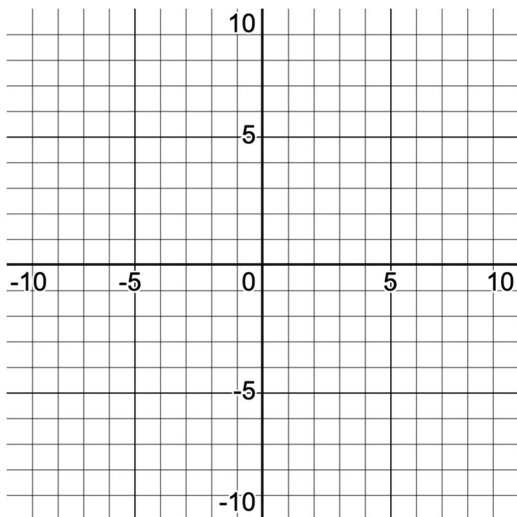
d. $(3 + 2i) + (5 - 3i)$

2-63.

For the graph of each function, what are the intercepts and the locator point (h, k) ? Sketch a graph of each function and state the domain and the range.

a. $y = |x - 4| - 2$

b. $y = -|x + 1| + 3$



x-intercepts: _____

x-intercepts: _____

y-intercept: _____

y-intercept: _____

Locator point: _____

Locator point: _____

Domain: _____

Domain: _____

Range: _____

Range: _____