

Name: _____

Period: _____

Checkpoint 5B

Integrated Math 2

Create a rough sketch of each function. Label any intercepts and write whether it's an increasing or decreasing function.

1) $y = (1.5)^x$

2) $y = \left(\frac{2}{3}\right)^x$

3) $y = (4)^{-x} + 2$

Create a rough sketch of each function. Describe the end behavior using the notation below:

As $x \rightarrow -\infty$, $f(x) \rightarrow$ _____; As $x \rightarrow +\infty$, $f(x) \rightarrow$ _____.

4) $y = (2)^{x+1}$

5) $y = (0.25)^x - 2$

6) $y = (3)^{-x} + 1$

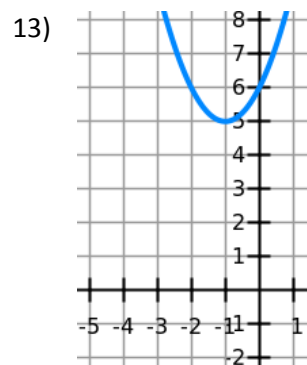
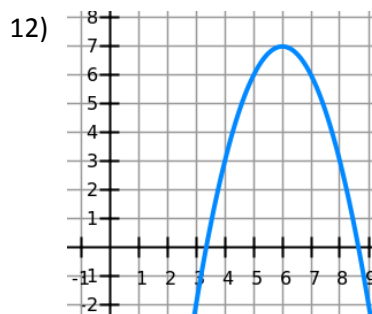
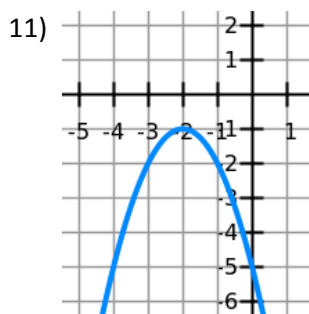
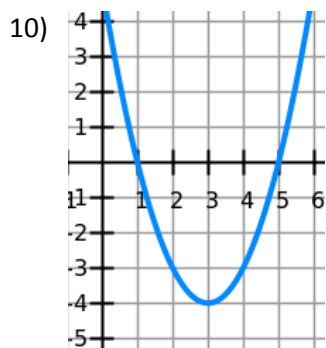
Graph the first function and then graph the second function. Describe what changes from the first to the second.

7) 1st Function: $y = (0.8)^x$; 2nd Function: $y = (0.2)^x$

8) 1st Function: $y = (3)^x$; 2nd Function: $y = (5)^x$

9) 1st Function: $y = (4)^x$; 2nd Function: $y = (0.5)^x$

Determine the equation of the graphed parabola. Write it in vertex form: $y = (x - h)^2 + k$ where the vertex is (h, k) .



Graph the system of equations and label the solutions.

14) $y = -2x^2 + 3x - 2$
 $y = 2^x - 3$

15) $y = x^2 + 2x - 4$
 $y = (0.75)^x$