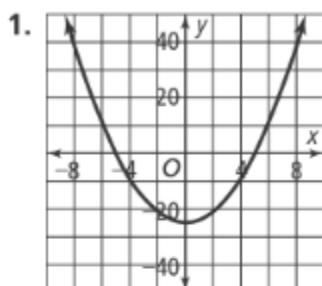
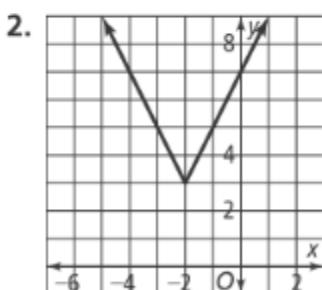


Sections 1-1 – 1-3 Review

For Items 1–2, identify the following information for the function of each graph:

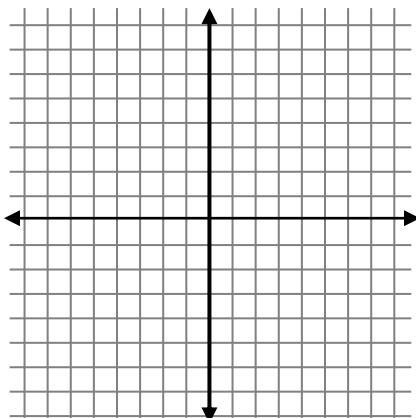


- Domain:
 Range:
 x -intercepts:
 y -intercept:
 Interval positive:
 Interval negative:
 Interval increasing:
 Interval decreasing:
 Rate of change over the interval $(-2, 0)$:

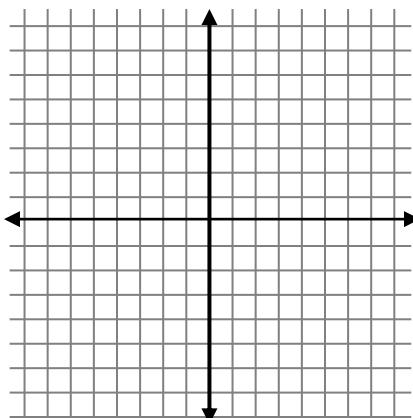


- Domain:
 Range:
 x -intercepts:
 y -intercept:
 Interval positive:
 Interval negative:
 Interval increasing:
 Interval decreasing:
 Rate of change over the interval $(-2, 0)$:

3. Graph the function $g(x) = |x| + 4$

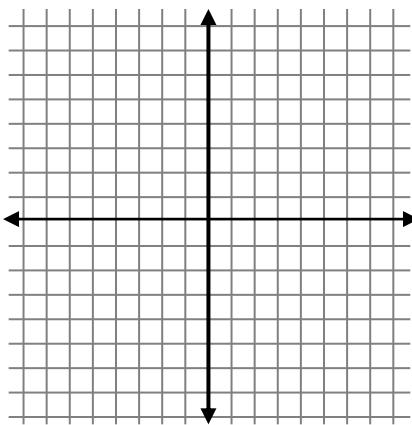


4. Graph the function $h(x) = 0.5x^2$



5. Graph the following piecewise function:

$$f(x) = \begin{cases} 2, & -4 \leq x \leq -2 \\ 2x - 4, & -1 \leq x < 2 \\ 3x, & 2 \leq x < 5 \end{cases}$$



What transformations of $f(x) = x^2$ are applied to get the function g ?

6. $g(x) = 3(x + 2)^2$

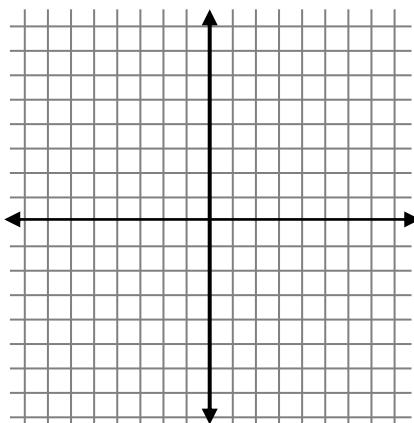
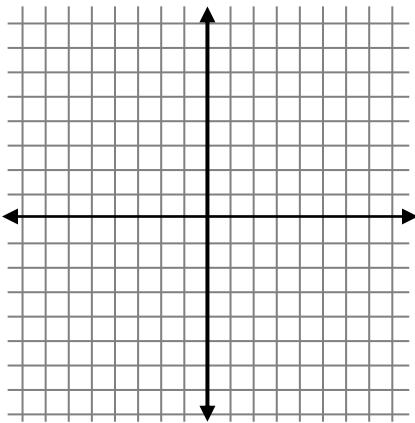
7. $g(x) = -(x - 5)^2 + 1$

a) Describe with words: _____

a) Describe with words: _____

b) Graph

b) Graph



8. Given the following function, find a) $f(-3)$ b) $f(-2)$

$$f(x) = \begin{cases} 3, & -5 \leq x < -2 \\ x - 2, & -2 \leq x \leq 0 \end{cases}$$