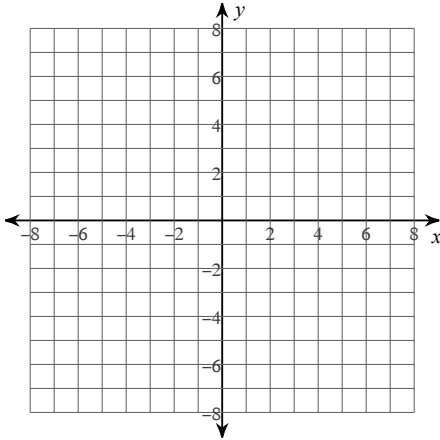


Unit 5 Graphing Quadratics Review

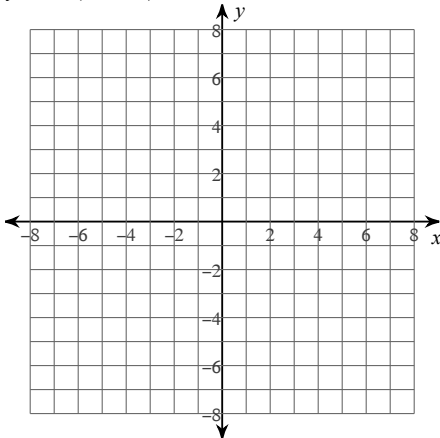
Graph the function and identify the key features. Approximate where necessary. Write intervals in both notations.

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



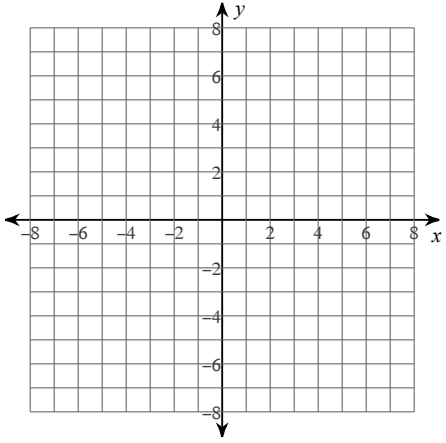
- 2) a. x-intercept(s):
- b. y-intercept:
- c. axis of symmetry:
- d. vertex:
- e. Max/Min Value:
- f. x-value that max/min the function:
- g. Domain:
- h. Range:
- j. Increasing:
- k. Decreasing:
- l. Direction of Opening:

3) $y = 2(x + 5)^2 - 3$



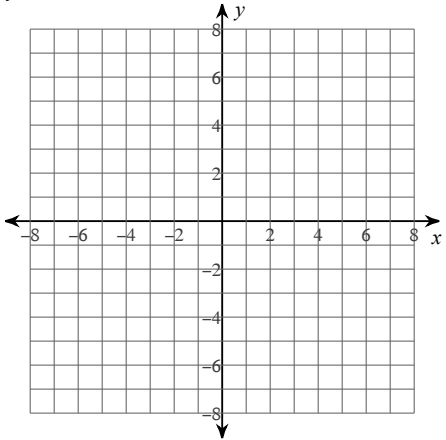
- 4) a. x-intercept(s):
- b. y-intercept:
- c. axis of symmetry:
- d. vertex:
- e. Max/Min Value:
- f. x-value that max/min the function:
- g. Domain:
- h. Range:
- j. Increasing:
- k. Decreasing:
- l. Direction of Opening:

5) $y = -2x(x - 4)$



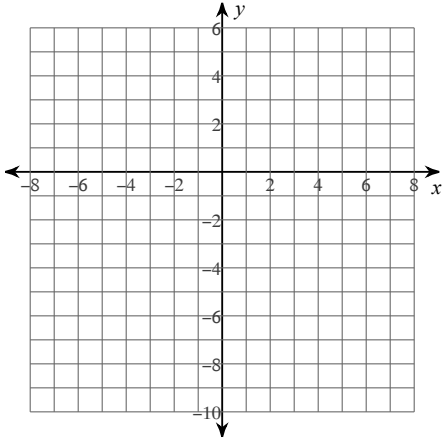
- 6) a. x-intercept(s): b. y-intercept:
 c. axis of symmetry:
 d. vertex:
 e. Max/Min Value:
 f. x-value that max/min the function:
 g. Domain: h. Range:
 j. Increasing: k. Decreasing:
 l. Direction of Opening:

7) $y = (x + 3)(x - 1)$



- 8) a. x-intercept(s): b. y-intercept:
 c. axis of symmetry:
 d. vertex:
 e. Max/Min Value:
 f. x-value that max/min the function:
 g. Domain: h. Range:
 j. Increasing: k. Decreasing:
 l. Direction of Opening:

9) $y = (x + 4)(x - 2)$



10) a. x-intercept(s): b. y-intercept:

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. x-value that max/min the function:

g. Domain:

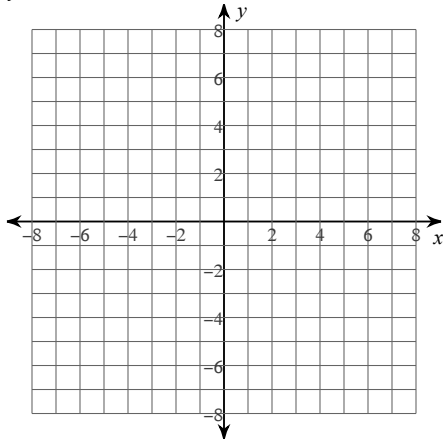
h. Range:

j. Increasing:

k. Decreasing:

l. Direction of Opening:

11) $y = x^2 - 2x - 3$



12) a. x-intercept(s): b. y-intercept:

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. x-value that max/min the function:

g. Domain:

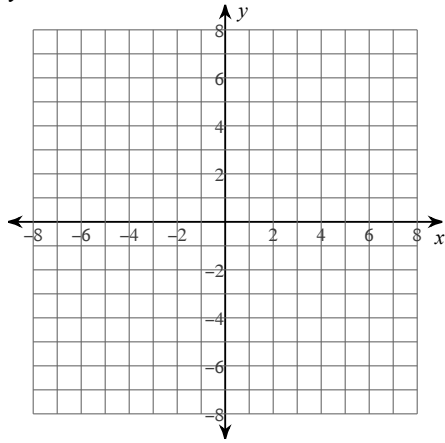
h. Range:

j. Increasing:

k. Decreasing:

l. Direction of Opening:

13) $y = -2x^2 - 4x + 5$



14) a. x-intercept(s): b. y-intercept:

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. x-value that max/min the function:

g. Domain:

h. Range:

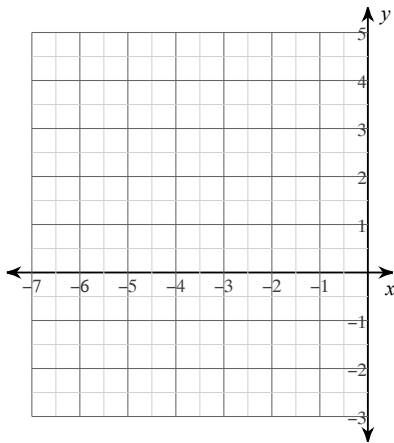
j. Increasing:

k. Decreasing:

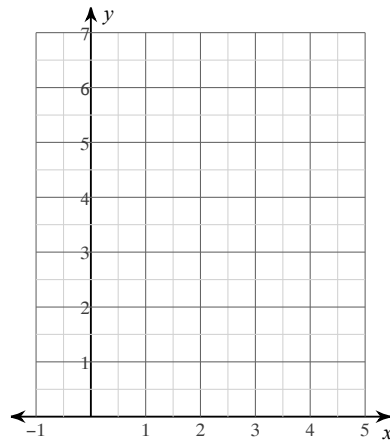
l. Direction of Opening:

Sketch the graph. Then write the equation in all three forms.

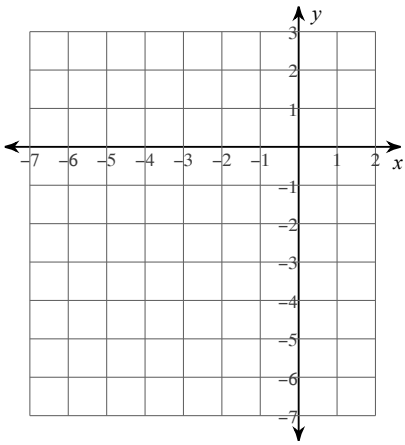
15) $y = -x^2 - 8x - 13$



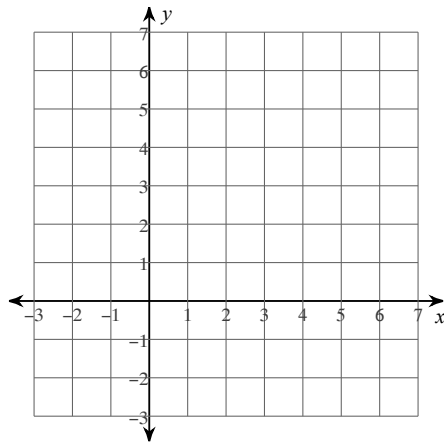
16) $y = x^2 - 6x + 11$



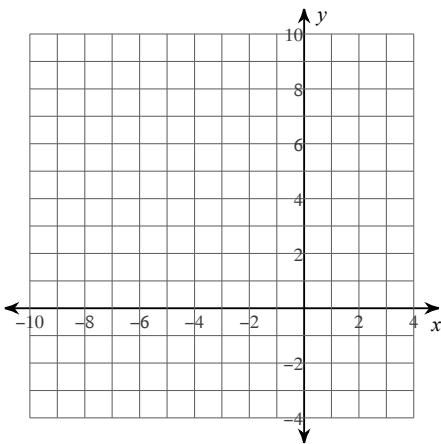
17) $y = -2x^2 - 16x - 30$



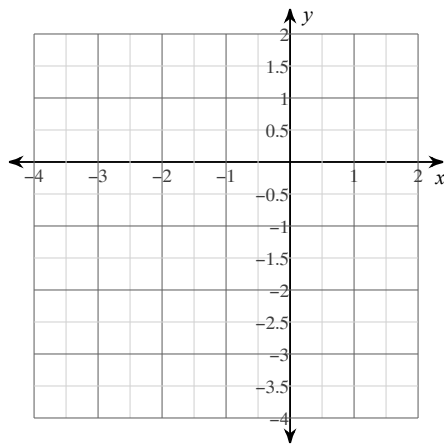
18) $y = 2x^2 - 4x$



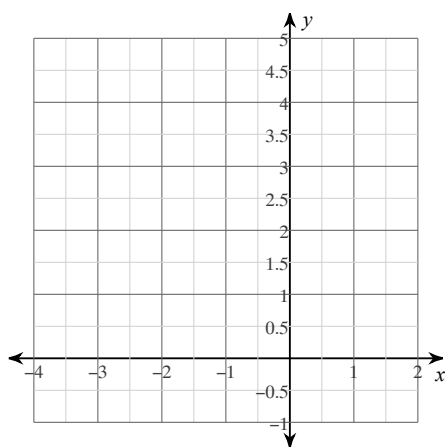
19) $y = 3(x + 3)^2 - 3$



20) $y = (x + 1)^2 - 3$



21) $y = -(x + 1)^2 + 4$



22) $y = \frac{1}{2}(x + 2)^2 + 3$

