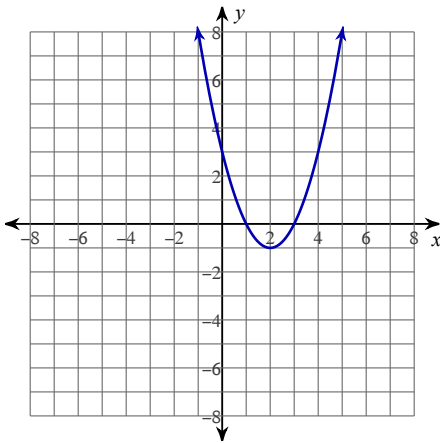


5.1 Identifying Key Features

Given the following graphs, identify the each key feature. Write intervals using interval notation. Approximate where necessary.

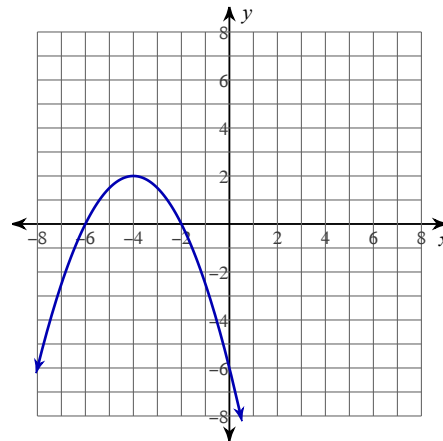
1)



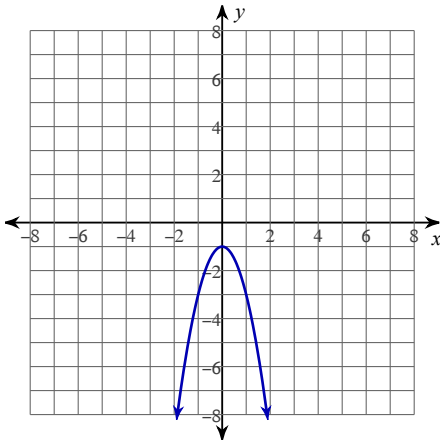
- 2) a. x-intercept(s):
- b. y-intercept:
- c. axis of symmetry:
- d. vertex:
- e. Max/Min Value:
- f. Direction of Opening
- g. Domain:
- h. Range:
- i. Increasing:
- j. Decreasing:
- k. Positive:
- l. Negative:
- m. End behavior:

- 3) a. x-intercept(s):
- b. y-intercept:
- c. axis of symmetry:
- d. vertex:
- e. Max/Min Value:
- f. Direction of Opening
- g. Domain:
- h. Range:
- i. Increasing:
- j. Decreasing:
- k. Positive:
- l. Negative:
- m. End behavior:

4)



5)



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

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. Direction of Opening

g. Domain:

h. Range:

i. Increasing:

j. Decreasing:

k. Positive:

l. Negative:

m. End behavior:

Given the following graphs, identify the each key feature. Write intervals using inequalities. Approximate where necessary.

7) a. x-intercept(s):

b. y-intercept:

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. Direction of Opening

g. Domain:

h. Range:

i. Increasing:

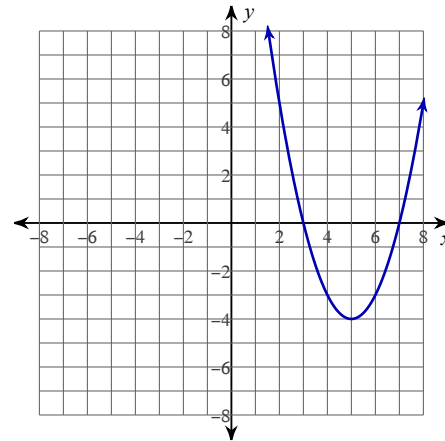
j. Decreasing:

k. Positive:

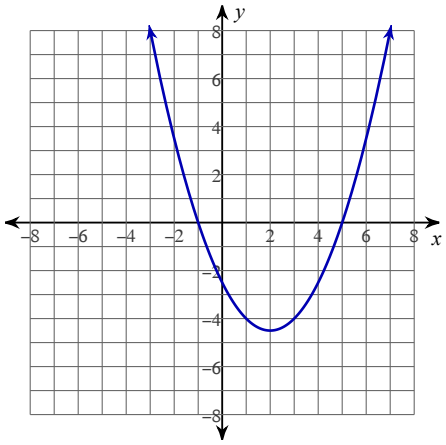
l. Negative:

m. End behavior:

8)



9)



10) a. x-intercept(s):

b. y-intercept:

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. Direction of Opening

g. Domain:

h. Range:

i. Increasing:

j. Decreasing:

k. Positive:

l. Negative:

m. End behavior:

Factor each completely.

11) $p^2 + 5p - 6$

12) $x^2 + 9x$

13) $x^2 + 12x + 20$

14) $p^2 - 11p + 24$

15) $7a^3 - 10a^2$

16) $28r^3 + 184r^2 - 320r$