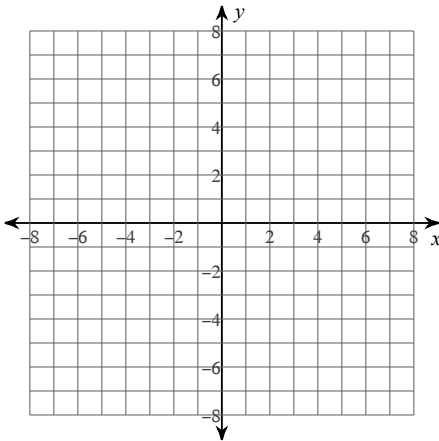


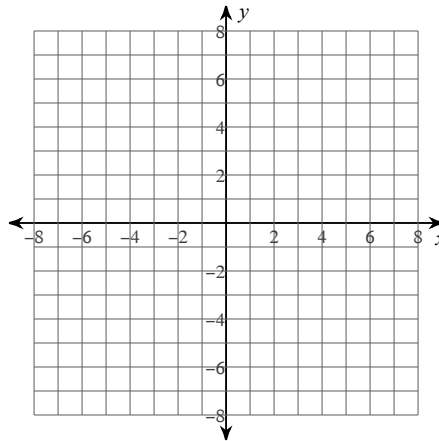
5.5 Intercept Form

Sketch the graph of each function.

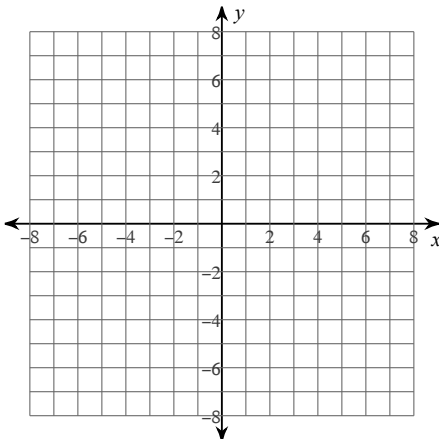
1) $y = x(x + 4)$



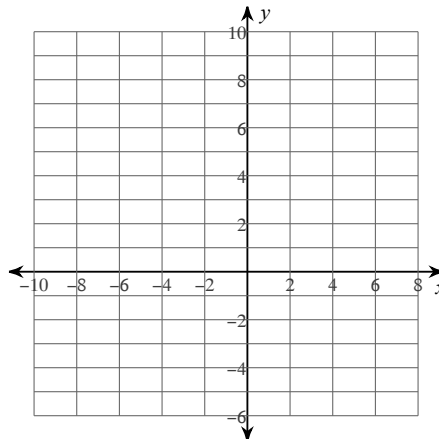
2) $y = -(x + 6)(x + 2)$



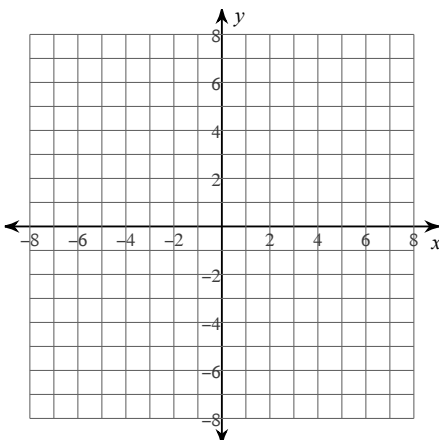
3) $y = 2(x - 4)(x - 2)$



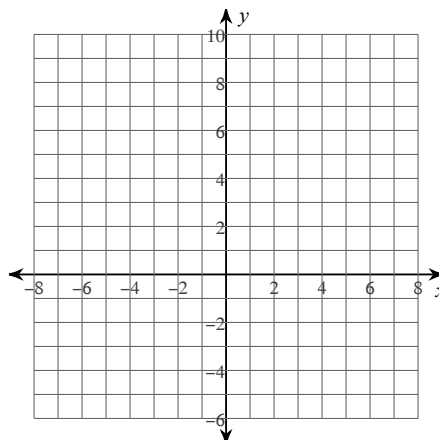
4) $y = -(x + 8)(x + 2)$



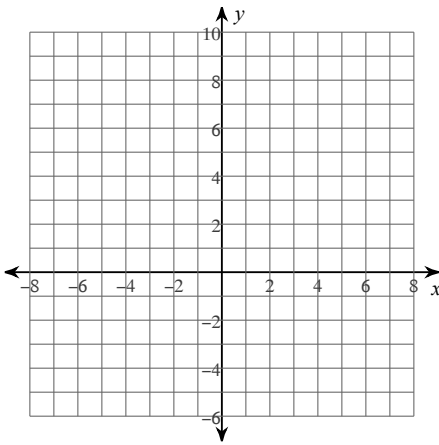
5) $y = 2(x + 1)(x - 3)$



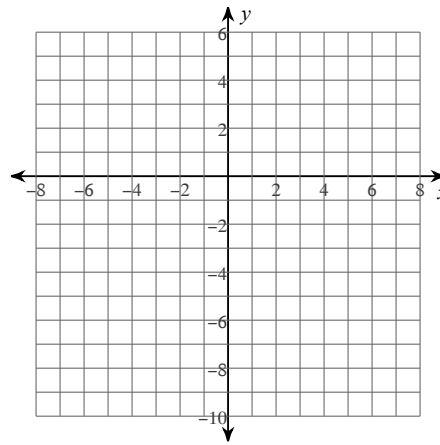
6) $y = 3(x - 3)(x - 5)$



7) $y = 2(x - 1)(x - 3)$

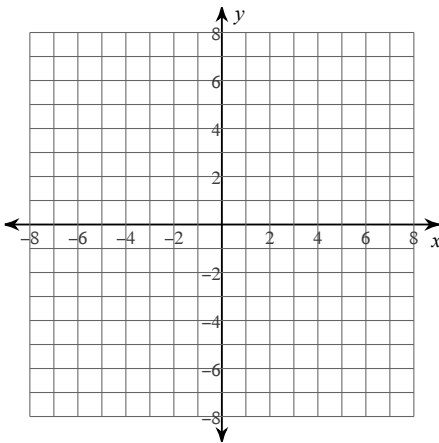


8) $y = -2(x - 3)(x - 5)$



Sketch the graph. Then identify the key features using interval notation.

9) $y = -(x + 5)(x + 1)$



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:

Sketch the graph of the function. Then identify the key features using inequalities.

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

$$12) y = -\frac{1}{2}(x + 4)(x - 2)$$

c. axis of symmetry:

d. vertex:

e. Max/Min Value:

f. Direction of Opening

g. Domain:

h. Range:

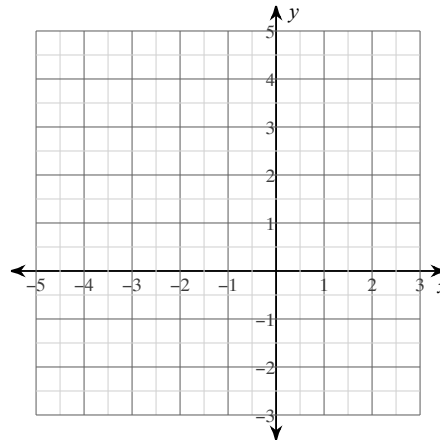
i. Increasing:

j. Decreasing:

k. Positive:

l. Negative:

m. End behavior:



13) What do the x-intercepts of a graph represent?

Write down the requested form. Then describe how to find the vertex.

14) Vertex form

15) Standard form

16) Intercept form