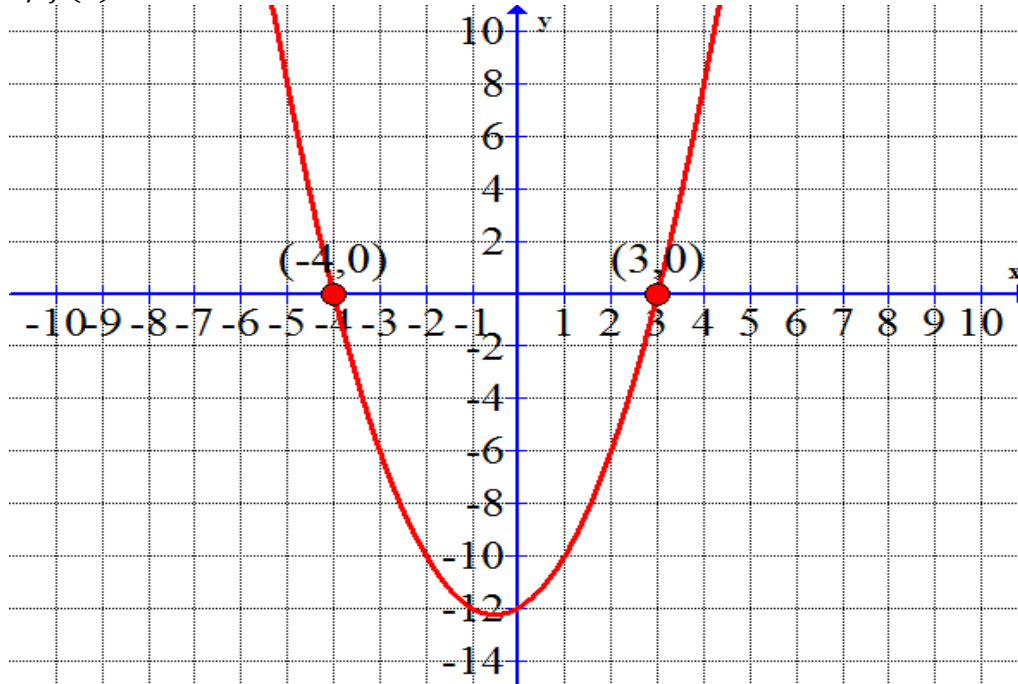


Section 5.5 Quadratic and Rational Inequalities

#1 – 8: Use the graph of  $f(x)$  to solve

- a)  $f(x) = 0$   $x = -4, 3$
- b)  $f(x) > 0$   $(-\infty, -4) \cup (3, \infty)$
- c)  $f(x) < 0$   $(-4, 3)$
- d)  $f(x) \geq 0$   $(-\infty, -4] \cup [3, \infty)$
- e)  $f(x) \leq 0$   $[-4, 3]$

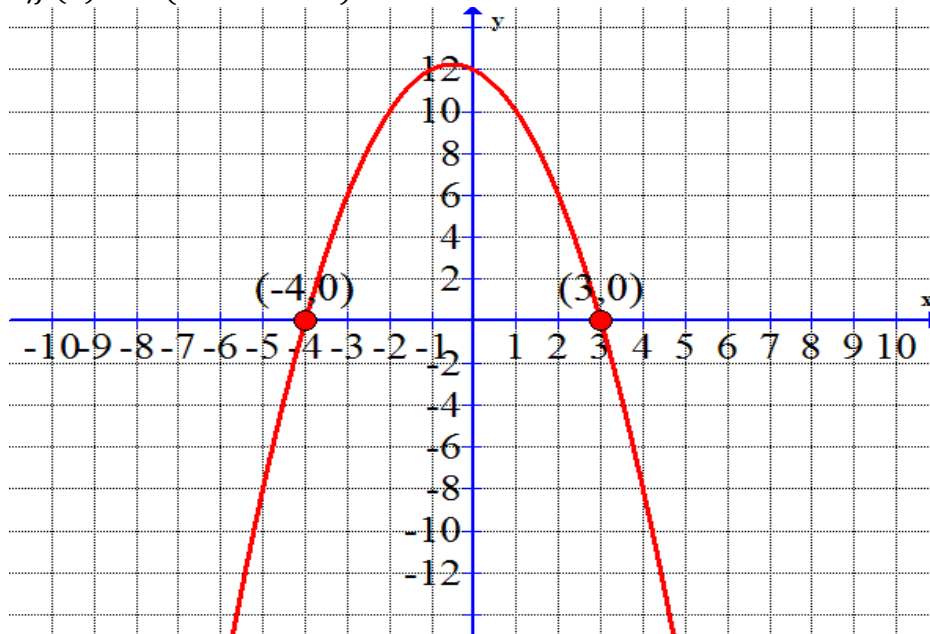
1)  $f(x) = x^2 + x - 12$



#1 – 8: Use the graph of  $f(x)$  to solve

- a)  $f(x) = 0$   $x = -4, 3$
- b)  $f(x) > 0$   $(-4, 3)$
- c)  $f(x) < 0$   $(-\infty, -4) \cup (3, \infty)$
- d)  $f(x) \geq 0$   $(-\infty, -4] \cup [3, \infty)$
- e)  $f(x) \leq 0$   $[-4, 3]$

3)  $f(x) = -(x^2 + x - 12)$



#1 – 8: Use the graph of  $f(x)$  to solve

a)  $f(x) = 0$   $x = -2$

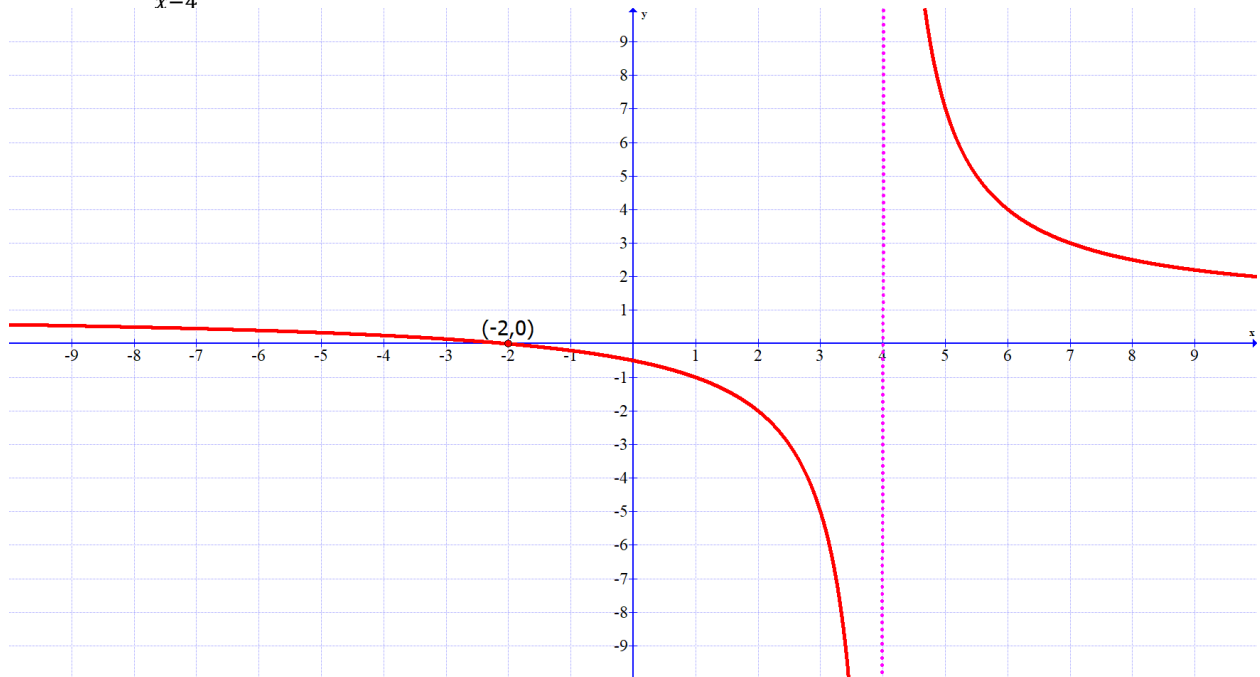
b)  $f(x) > 0$   $(-\infty, -2) \cup (4, \infty)$

c)  $f(x) < 0$   $(-2, 4)$

d)  $f(x) \geq 0$   $(-\infty, -2] \cup (4, \infty)$

e)  $f(x) \leq 0$   $[-2, 4)$

5)  $f(x) = \frac{x+2}{x-4}$



#1 – 8: Use the graph of  $f(x)$  to solve

- a)  $f(x) = 0 \quad x = 3$
- b)  $f(x) > 0 \quad (-2, 3)$
- c)  $f(x) < 0 \quad (-\infty, -2) \cup (3, \infty)$
- d)  $f(x) \geq 0 \quad (-2, 3]$
- e)  $f(x) \leq 0 \quad (-\infty, -2) \cup [3, \infty)$

7)  $f(x) = \frac{3-x}{x+2}$

