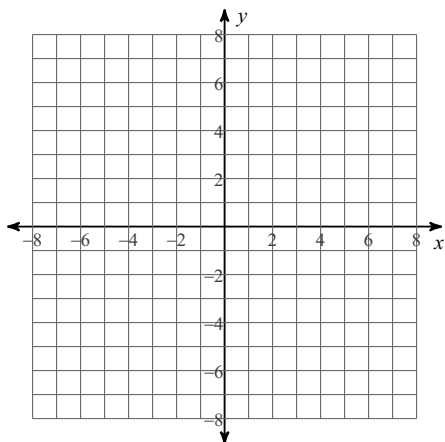


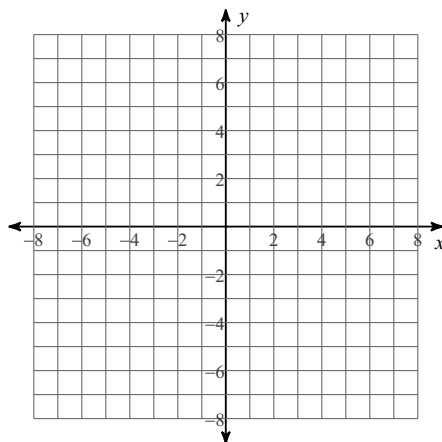
Extra Test Review 3

Graph each function.

1) $f(x) = -\frac{3}{x+1} - 1$

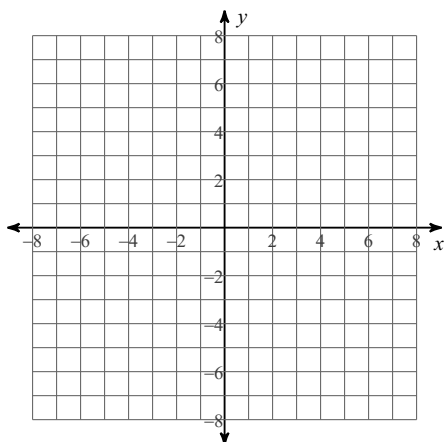


2) $f(x) = -\frac{1}{x-4} + 3$

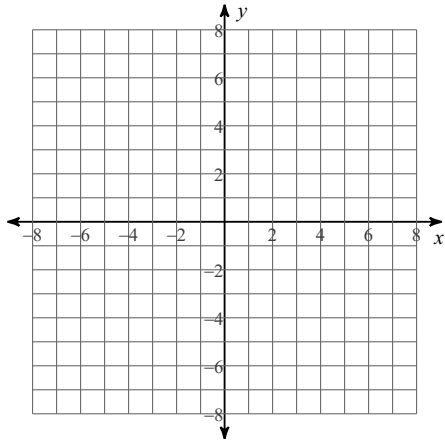


Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptote, and domain of each. Then sketch the graph.

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



$$4) f(x) = \frac{x^3 + 3x^2 - 4x}{-2x^2 - 6x}$$



Write the equation of the rational function, provided the following information.

5) VA: $x = 5$ and $x = 4$

Holes: $x = -2$

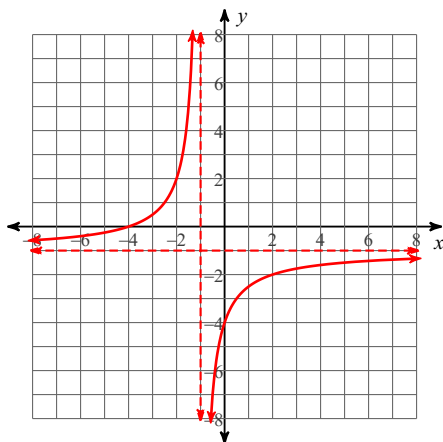
HA: $y = 25$

x-intercepts: $x = 2/5$ and $x = -2/5$

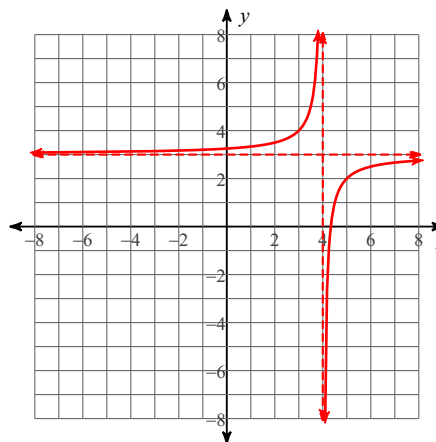
Extra Test Review 3

Graph each function.

1) $f(x) = -\frac{3}{x+1} - 1$

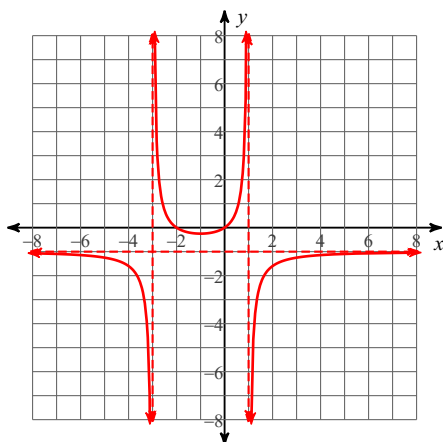


2) $f(x) = -\frac{1}{x-4} + 3$



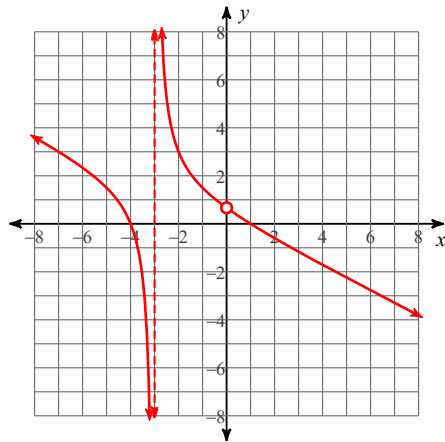
Identify the holes, vertical asymptotes, x-intercepts, horizontal asymptote, and domain of each. Then sketch the graph.

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



Vertical Asym.: $x = 1, x = -3$
 Holes: None
 Horz. Asym.: $y = -1$
 X-intercepts: $0, -2$
 Domain:
 All reals except $1, -3$

$$4) f(x) = \frac{x^3 + 3x^2 - 4x}{-2x^2 - 6x}$$



Vertical Asym.: $x = -3$
 Holes: $x = 0$
 Horz. Asym.: None
 X-intercepts: 1, -4
 Domain:
 All reals except -3, 0

Write the equation of the rational function, provided the following information.

- 5) VA: $x = 5$ and $x = 4$
 Holes: $x = -2$
 HA: $y = 25$
 x-intercepts: $x = 2/5$ and $x = -2/5$