Advanced Math F&S

Name_____

Graphing Rational Functions (S)

Date_____ Period____

Graph each function.

1) $f(x) = \dfrac{4}{x+1} + 2$

2) $f(x) = -\dfrac{1}{x-3} - 2$
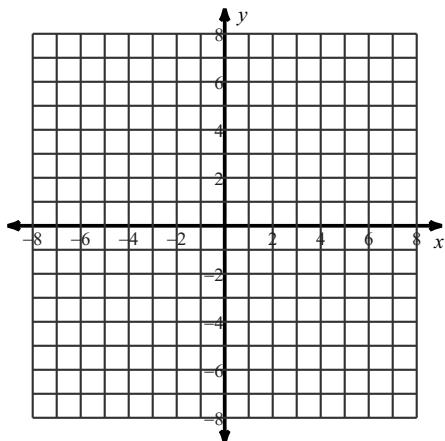
 Made with Infinite Algebra 2.
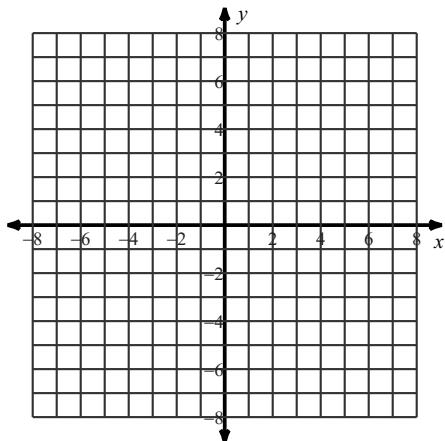
Identify the points of discontinuity, holes, vertical asymptotes, x-intercepts, horizontal asymptote, and domain of each. Then sketch the graph.

3) $f(x) = \dfrac{x^3 - 9x}{x^3 + 5x^2 + 6x}$
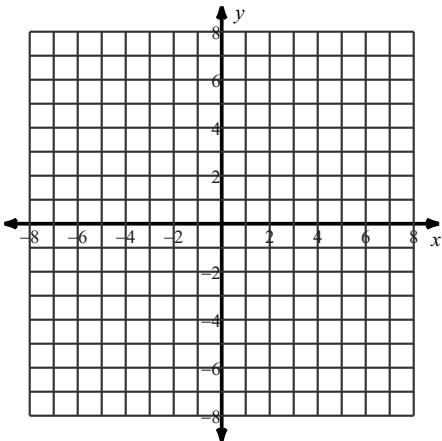
4) $f(x) = \dfrac{-x + 4}{x^2 - 2x - 3}$
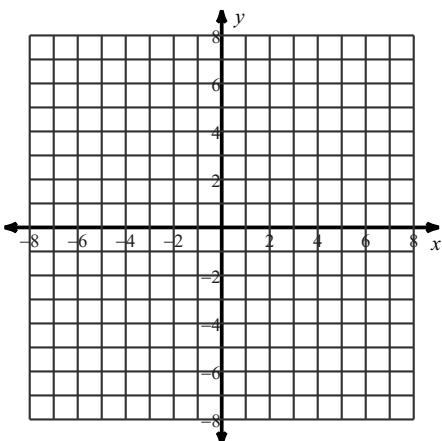
5) $f(x) = \dfrac{x^3 + 2x^2 - 8x}{-4x^2 + 16}$

6) $f(x) = \dfrac{x^2 - 2x - 8}{3x + 3}$