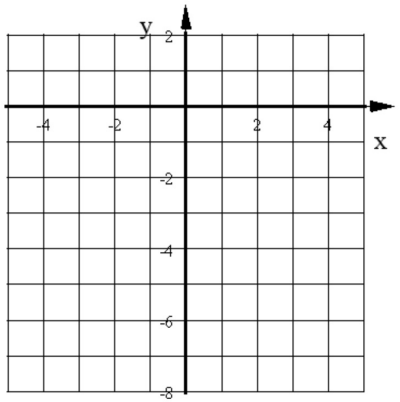
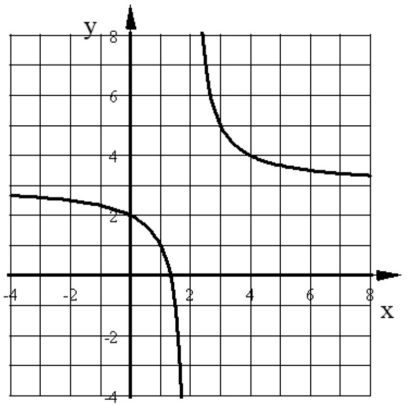
Algebra 2 Bellwork Friday, December 20, 2013

1. Graph this reciprocal function: $y = \frac{-0.15}{x+1} - 4$



2. Write the equation of this translation of the function $y = \frac{2}{x}$



3. State the points of discontinuity and classify them as holes or vertical asymptotes.

$$y = \frac{x^2 + x - 42}{2x^3 - 4x^2 - 48x}$$

4. Write the equation of the horizontal asymptote of each rational function, if any.

a. $y = \frac{3x^2 + x - 4}{x + 2}$

b. $y = \frac{8x + 7}{4x^2 - 1}$

c. $y = \frac{3x^2 + 10x - 12}{6x^2 - 5x - 3}$