

Bellwork Alg 2

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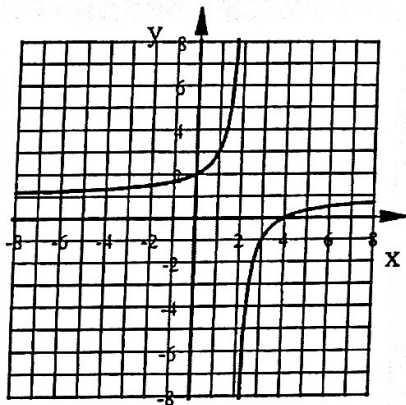
1. Simplify. State restrictions on the variable.

$$\frac{4x^2 + 8x - 60}{x^3 + 6x^2 + 5x} \div \frac{12x^2 - 108}{2x^3 + 10x^2 + 8x}$$

2. Find all points of discontinuity: $\frac{7x^2 + 3x - 11}{20x^2 - 7x - 3}$

3. Write the equation of the graph below which is a transformation of $y = \frac{2}{x}$

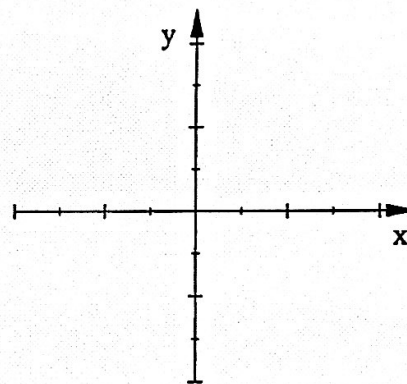
$y =$



4. Graph this function, showing asymptotes as dashed lines. State the equations of the asymptotes. $y = \frac{0.1}{x+4} - 3$

HA:

VA:



5. For the given rational functions state the equations of the HA and VA, if any. State the Holes, x-intercepts and y-intercepts, if any.

a) $y = \frac{8x^2 - 128}{3x^2 + 12x - 96}$

Eq HA:

Eq VA:

Holes:

x-int:

y-int:

b) $y = \frac{x^3 + 6x^2 - 9x - 54}{8x^2 + 6x}$

Eq HA:

Eq VA:

Holes:

x-int:

y-int