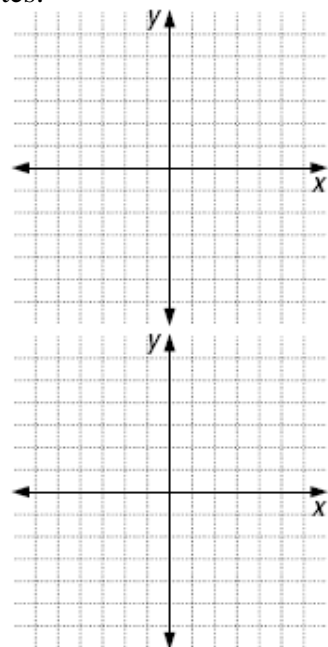


In 1 - 2, sketch the graph of the function. Label the vertical and horizontal asymptotes.

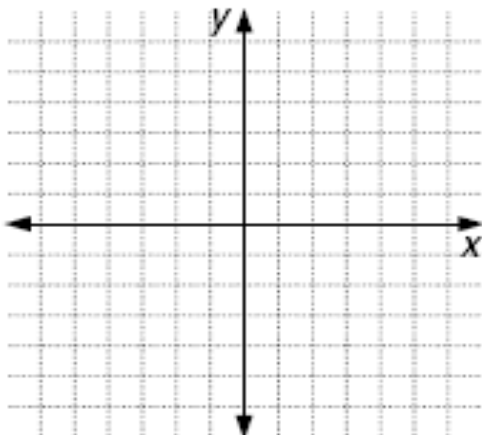
1. $y = \frac{3}{x+2} - 1$

2. $y = \frac{-9}{x-1} + 3$

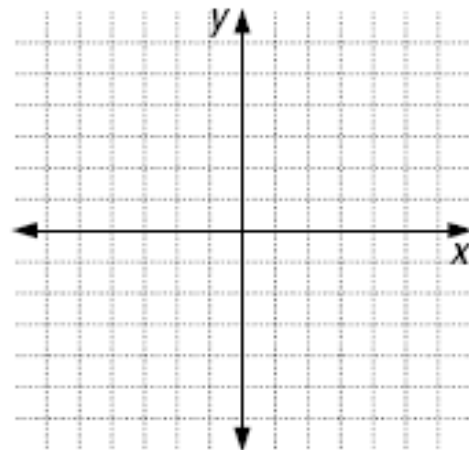


In 3 - 5, sketch the graph of the function. Label all vertical and horizontal asymptotes, holes, x & y-intercepts, if any.

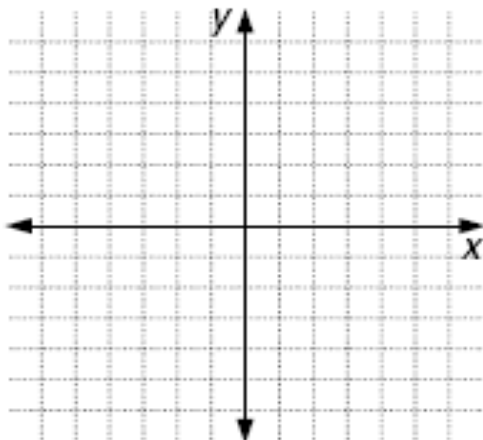
3. $y = \frac{2(x-2)}{(x+3)(x-2)}$



4. $y = \frac{-5(x+3)}{(x+3)(x-2)}$



5. $y = \frac{x^2 - 9}{x^2 - x - 6}$



6. Write an equation for the translation of $y = \frac{-7}{x}$ that has asymptotes at $x = 8$ and $y = -4$

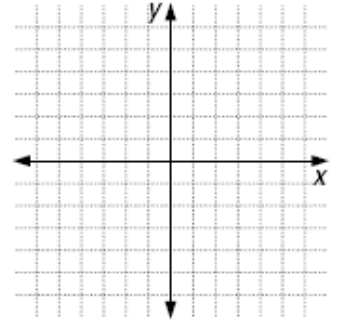
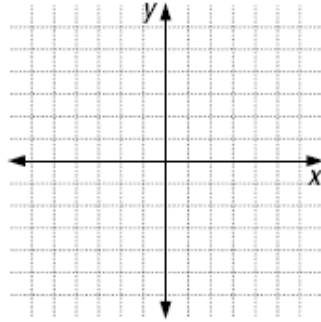
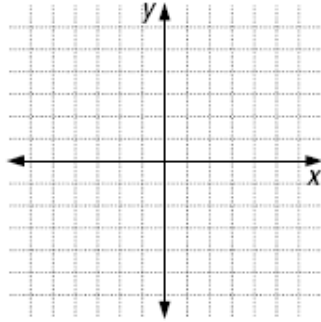
6. _____

In 7 – 9, compare the graphs.

7. $y = \frac{6}{x}$

8. $y = -\frac{6}{x}$

9. $y = \frac{6}{x+3} - 3$



In 10 – 11, solve.

10. $\frac{-4}{x-2} = \frac{9}{x-6}$

10. _____

11. $\frac{x+3}{5} = \frac{x-2}{9}$

11. _____