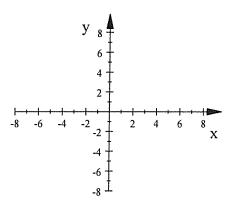
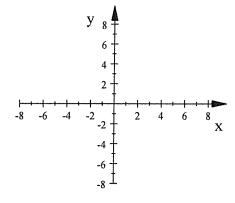
Sketch the asymptotes (dashed lines) labeled with their equations and the branches for the graph of each equation.

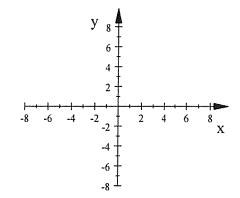
1. 
$$y = \frac{1}{x} - 3$$



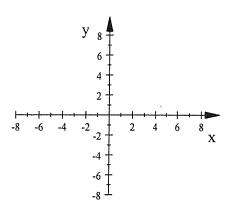
3. 
$$y = \frac{-10}{x+3} - 2$$



2. 
$$y = \frac{-2}{x-4}$$



4. 
$$y = \frac{0.2}{x} + 4$$



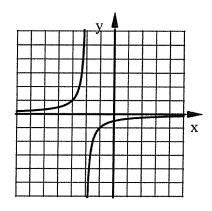
Write an equation for the transformation of  $y = \frac{1}{x}$  that has the given asymptotes and whose branches are in the given quadrants.

5. Asymptotes: x = 5, y = -4Branches are in Quadrants II and IV 6. Asymptotes: x = 0, y = 7Branches are in Quadrants I and III

EQ: EQ:

Write the equation of each graph which is a transformation of  $y = \frac{1}{x}$ 

7. EQ:



8. EQ:

