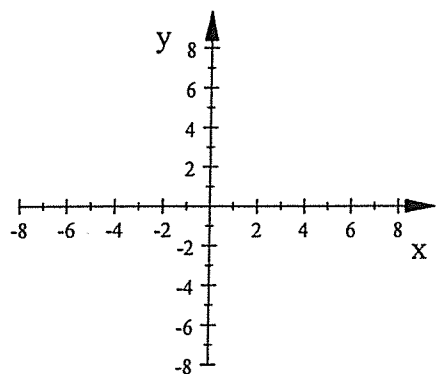
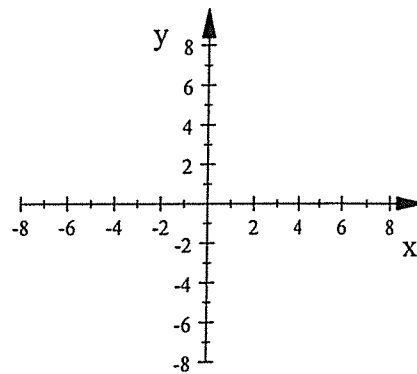


Sketch the asymptotes (dashed lines) and the branches for the graph of each equation. Write the equations of the asymptotes next to each one.

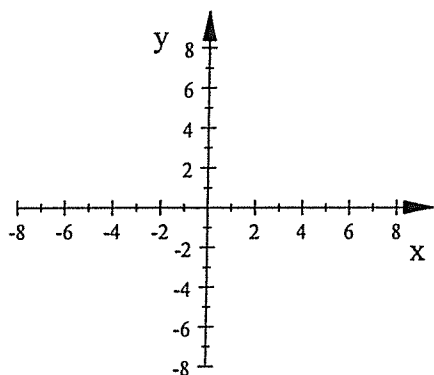
1.  $y = \frac{1}{x} - 3$



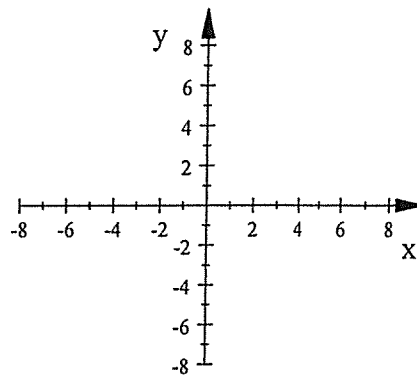
2.  $y = \frac{-2}{x-4}$



3.  $y = \frac{-15}{x+3} - 2$



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:  $x = 5, y = -4$

Branches are in Quadrants II and IV

EQ:

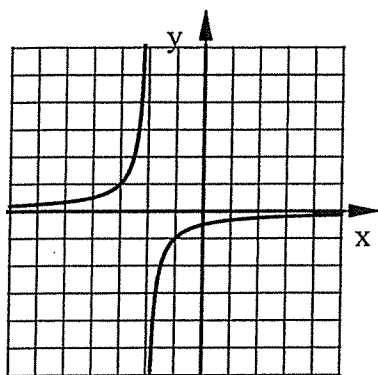
6. Asymptotes:  $x = 0, y = 7$

Branches are in Quadrants I and III

EQ:

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

7. EQ:



8. EQ:

