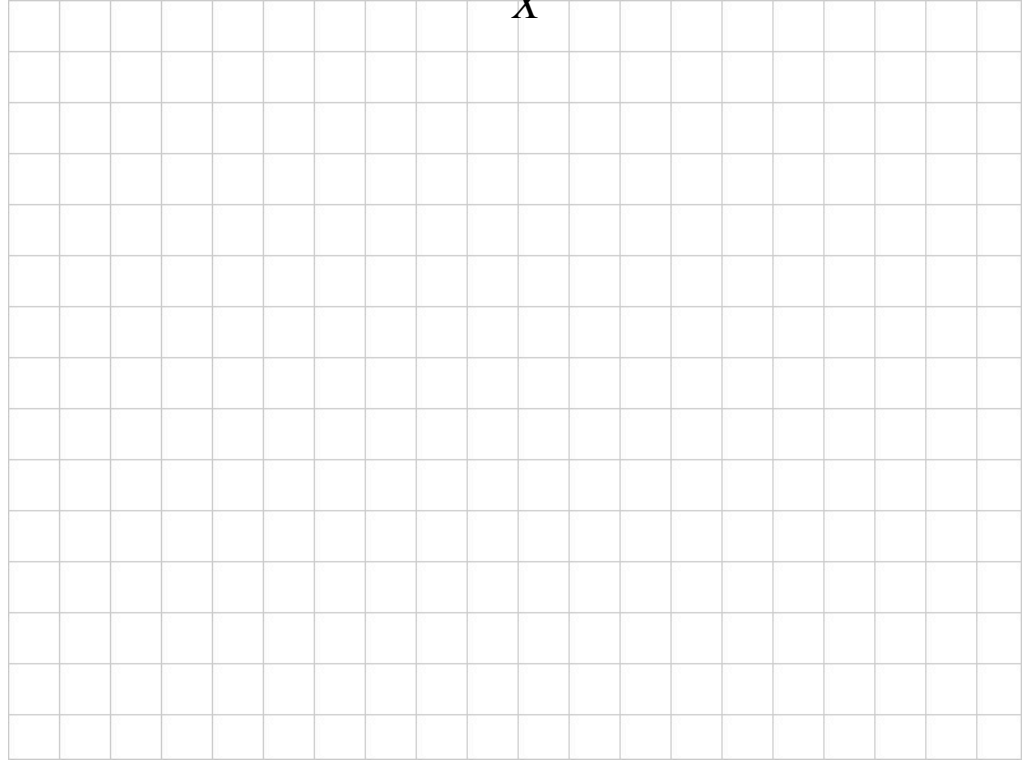


I. Draw carefully the hyperbolas of equations $y = \frac{A}{x-l} + h$ by applying the changes of variables defined by $X = x - l$ and $Y = y - h$ with $Y = \frac{A}{X}$

• $(H_1)y = \frac{1}{x-3} + 2$

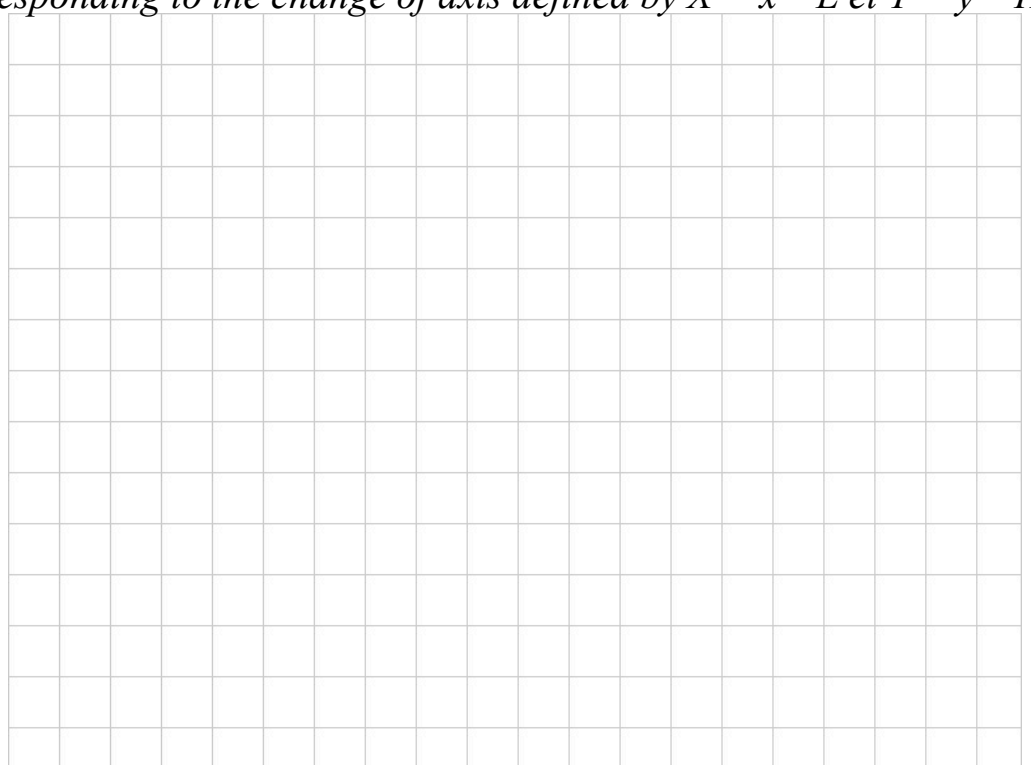
• $(H_2)y = -\frac{1}{x+2} + 1$



II. Draw carefully the hyperbolas (H) of equations type $y = \frac{A}{x-l} + h$ by applying the change of variable corresponding to the change of axis defined by $X = x - L$ et $Y = y - H$ with $Y = \frac{A}{X}$

• $(H_3)y = \frac{4}{x-4} - 2$

• $(H_4)y = -\frac{4}{x+4} + 2$



III. Change the equation $y = \frac{ax+b}{cx+d}$ into $y = \frac{A}{x-l} + h$ then draw the corresponding Hyperbola in showing the asymptotes and the symmetries.

• $(H_5)y = \frac{x-1}{x+3}$

Find A, H, L to change the equation into

$$y = \frac{A}{x+3} + h$$

and draw the hyperbola.



• $(H_6)y = \frac{2x+5}{x-2}$

Find A, H, L to change the equation into

$$y = \frac{A}{x-2} + H$$

and draw the hyperbola.

