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 équations 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.