

$$h) \frac{13}{2x+1} \geq 9 - \frac{38}{4-x} \rightarrow k)$$

$$f(x) \geq g(x)$$

$$h(x) \geq 0$$

$$\frac{13}{2x+1} - 9 + \frac{38}{4-x} \geq 0$$



$$2x+1 \neq 0$$

$$4-x \neq 0$$

$$2x \neq -1$$

$$x \neq -\frac{1}{2}$$

$$x \neq 4$$

$$\frac{13(4-x)}{(2x+1)(4-x)} - \frac{9(2x+1)(4-x)}{(2x+1)(4-x)} + \frac{38(2x+1)}{(2x+1)(4-x)} \geq 0$$

$$\frac{42 - 13x - 9(-2x^2 + 7x + 4) + 76x + 38}{(2x+1)(4-x)} \geq 0$$

$$\frac{42 - 13x + 18x^2 - 63x - 36 + 76x + 38}{(2x+1)(4-x)} \geq 0$$

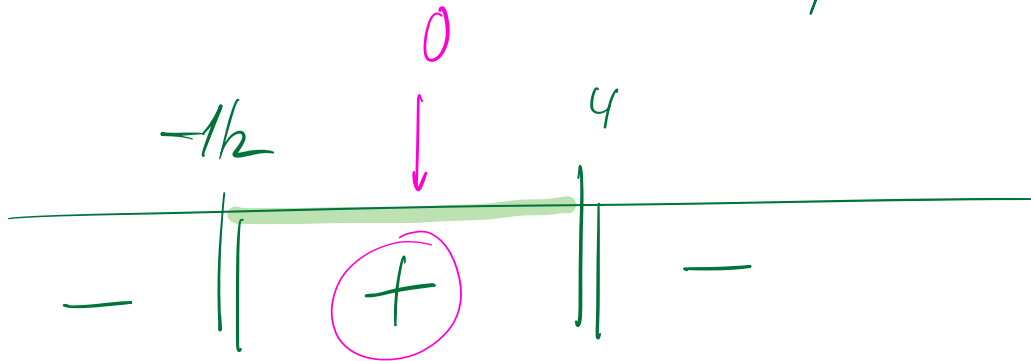
$$h(x) = \frac{18x^2 + 44}{(2x+1)^1(4-x)^1} \geq 0$$

$$h(0) = 11 > 0$$

$$D_h = \mathbb{R} - \left\{-\frac{1}{2}; 4\right\}$$

$$h(x) = 0 \Leftrightarrow x^2 = -\frac{44}{18}$$

$\Rightarrow$  pas de zéros



$$h(x) \geq 0 \Leftrightarrow x \in ]-\frac{1}{2}; 4[$$

$$\Leftrightarrow -0,5 < x < 4$$