Ex 6 : 1) a. $S =]-\infty ; 2[$ $\Rightarrow$ NON

b. $-4x - 3 \geq -10$

$-4x \geq -7$

$x \leq \frac{7}{4}$ $S =]-\infty ; \frac{7}{4}[$ $\Rightarrow$ NON

c. $5x - 4 \leq 7$

$5x \leq 11$

$x \leq \frac{11}{5}$ $S =]-\infty ; \frac{11}{5}]$ $\Rightarrow$ OUI

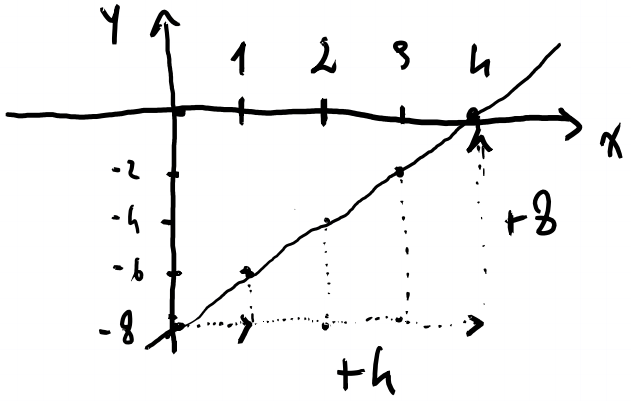
car $2 \in S$.

d. $8 - 3x \geq 3$

$-3x \geq -5$

$x \leq \frac{5}{3}$ $S =]-\infty ; \frac{5}{3}]$ $\Rightarrow$ NON

2) $f(x) = 2x - 8$



$\frac{8}{4} = 2$

$\Rightarrow$ **c)**

Ex 7 : $f(2) = 4 \quad f(4) = 5$

$f(x) = ax + b$

$f(2) = 2a + b = 4$

$f(4) = 4a + b = 5$

$-2a + 0 = -1 \Rightarrow a = \frac{1}{2}$

$2 \times \frac{1}{2} + b = 4 \Rightarrow b = 3$

$f(x) = \frac{1}{2}x + 3$

Ex 8 : $(3x-5)(4-x)$

$3x-5>0$ ⊕ ↓ à droite de $5/3$

$3x>5$

$x>\frac{5}{3}$

$4-x>0$ ⊕ ↓ à gauche de 4

$-x>-4$

$x<4$

x	$-\infty$		$5/3$		4		$+\infty$
$3x-5$		$-$	ϕ	$+$			
$4-x$			$+$		ϕ	$-$	
$(3x-5)(4-x)$		$-$	ϕ	$+$	ϕ	$-$	

Ex 9 : $x^2-x-20=0$

$a=1 \quad b=-1 \quad c=-20$

$\Delta = b^2-4ac = (-1)^2-4\times1\times(-20) = 81$

$x_1 = \frac{-b-\sqrt{\Delta}}{2a} = \frac{-(-1)-9}{2} = \frac{1-9}{2} = -4$

$x_2 = \frac{-b+\sqrt{\Delta}}{2a} = \frac{-(-1)+9}{2} = \frac{1+9}{2} = 5$

$S = \{-4 ; 5\}$