

Fondamentaux du chapitre

A)

1. $m = \frac{2}{3}$; $p = \frac{6}{3} = 2$.

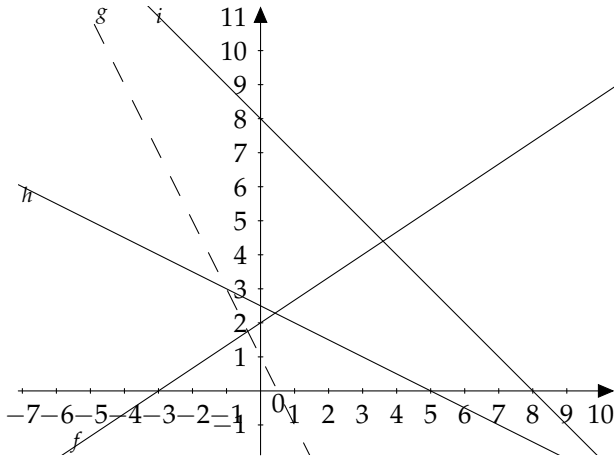
2. $f(x) = (x - 1)^2 - x^2 = x^2 - 2x + 1 - x^2 = -2x + 1$, $m = -2$; $p = 1$.

3. $m = \frac{2}{3}$; $p = \frac{6}{3} = 2$.

4. $m = \frac{-1}{2}$; $p = \frac{5}{2}$.

5. $m = -1$; $p = 8$.

Représentations graphiques :



B)

1. $f_1(x) = -x$.

2. $f_2(x) = 1 + 3x$.

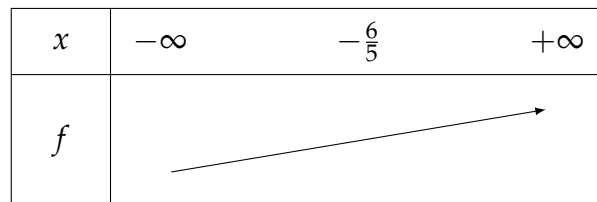
3. $f_3(x) = 3 - \frac{1}{3}x$.

4. $f_4(x) = 2$.

C)

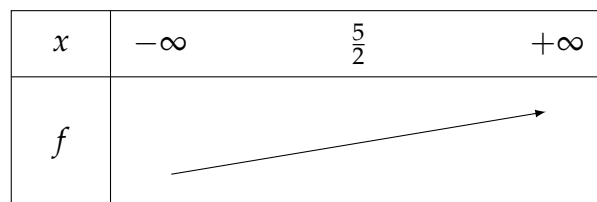
1.

x	$-\infty$	$-\frac{6}{5}$	$+\infty$
$f(x)$	-	0	+



2.

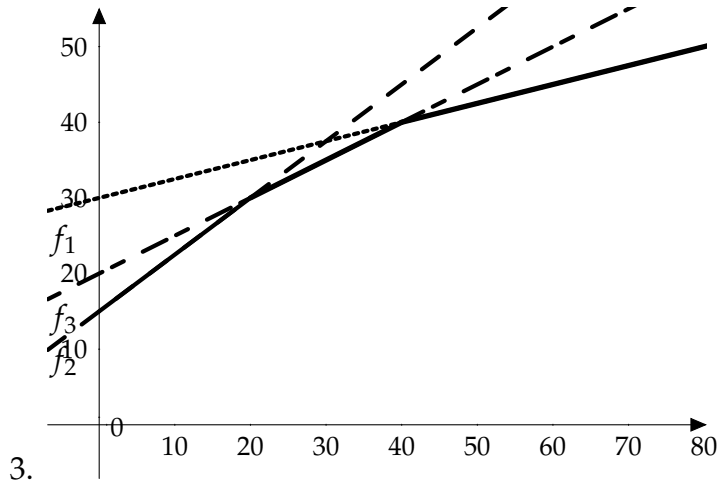
x	$-\infty$	$\frac{5}{2}$	$+\infty$
$f(x)$	+	0	-



Un problème de facturation

1. $f_1(x) = 30 + 0,25x$, $f_2(x) = 15 + 0,75x$, $f_3(x) = 20 + 0,5x$.

2. On trouve $(a)\mathcal{S} = \{30\}$, $(b)\mathcal{S} = \{20\}$, $(c)\mathcal{S} = \{40\}$.



4. On calcule $f_1(25)$, $f_2(25)$, $f_3(25)$, on constate que $f_3(25) < f_2(25) < f_1(25)$. Maxime a donc intérêt de prendre la formule numéro 3.