Révision général

4.32 P.177

b) (2 ; -1)

$\frac{3y}{3} = \frac{2x}{3} + \frac{1}{3}$

$\Downarrow$

$D_1 \Rightarrow \quad y = \frac{2}{3}x + \frac{1}{3}$

$a = a_1 = a_2 = \frac{2}{3}x$

$D_2 \Rightarrow \quad y = a_2 x + b_2$

$-1 = \frac{2}{3}(2) + b_2$

$-\frac{7}{3} = b_2$

$y = \frac{2}{3}x - \frac{7}{3}$

d) (-3 ; 1)

$3x + 2y = 1$

$\Downarrow$

$\frac{2y}{2} = \frac{-3x}{2} + \frac{1}{2}$

$\Downarrow$

$D_1 : \quad y = \underbrace{\left(\frac{-3}{2}\right)}_{a_1} x + \underbrace{\left(\frac{1}{2}\right)}_{b_1}$

$D_2 ? \rightarrow \quad y = a_2 x + b_2$

$a_1 \cdot a_2 = -1 \qquad a_2 = \frac{-1}{a_1} = \frac{2}{3}$

$y = \frac{2}{3}x + b_2 \Rightarrow (-3 ; 1)$

$\Downarrow$

$1 = \frac{2}{3}(-3) + b_2$

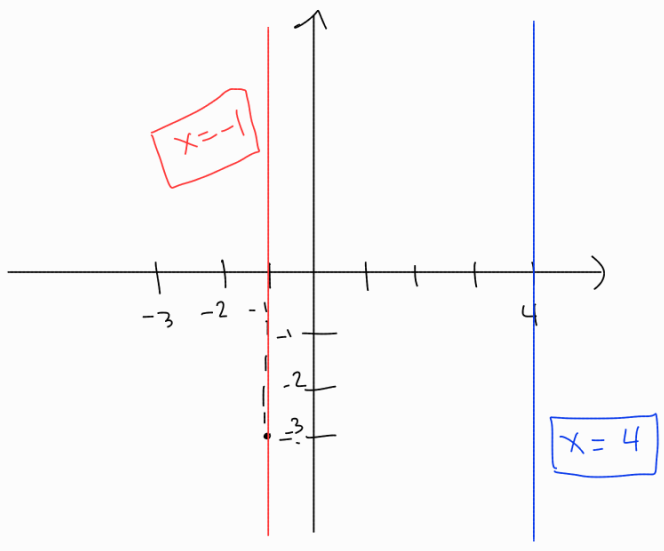
$\Downarrow$

$1 = -2 + b_2$

$+2 \quad +2$

$3 = b_2 \Rightarrow D_2 \quad y = \frac{2}{3}x + 3$

c) (-1 ; -3) et $x = 4$

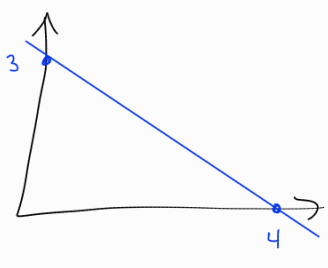


4.31

c) $2x - 6 = 0 \Rightarrow \frac{2x}{2} = \frac{6}{2} \Rightarrow x = \frac{6}{2} \Rightarrow x = 3$

$-6 \quad +6$

4.27



$y = a(x) + 3$

$y = \frac{-3}{4}x + 3$

$0 = a(4) + 3 \Rightarrow \frac{-3}{4} = \frac{4a}{4} \Rightarrow a = \frac{-3}{4}$

#4,39 P.187

a) $x + y = 100$
$x - y = 12$

$x = 100 - y$

$x = 12 + y$

$100 - y = 12 + y$

$100 - 12 = y + y$

$\frac{88}{2} = \frac{2y}{2}$

$44 = y$

$x = 12 + 44$

$x = 56$

b) $5x + 10y = 850$

$\frac{10y}{10} = \frac{850}{10} - \frac{5x}{10}$

$y = 85 - \frac{1}{2}x$

$5x + 10y = 850$

$\frac{5x}{5} = \frac{850}{5} - \frac{10y}{5}$

$x = 170 - 2y$

$y = 85 - \frac{1}{2}(170 - 2y)$

Exercices révisions . PDF

Partie #1

1.) $-2x^{-2/5} \Rightarrow \frac{-2}{\sqrt[5]{x^2}}$

a^{-n}

2.a) $3 - 4 \div 3x + 2(x - 1) \div 3 + x$

$3 - 4 \div 3x + 2x - 2 \div 3 + x$

$3 - \frac{4}{3x} + \frac{2x - 2}{3} + x$

2.d) $1 - 9^0 \cdot 3x^{-1}$

$1 - 9^0 \cdot \frac{3}{x^1}$

3.) $(2 ; -1)$ $y = 3x^2 + k \cdot x - 1$

$-1 = 3(2)^2 + k \cdot 2 - 1$

$-1 = 12 + 2k - 1$

$-1 = 11 + 2k$

$-11 \quad -11$

$\frac{-12}{2} = \frac{2 \cdot k}{2}$

$-6 = k$

4.a) $\frac{(2x + 3)^{\cdot 2}}{5^{\cdot 2}} - \frac{(3x - 1)^{\cdot 5}}{2^{\cdot 5}} = \frac{(4x + 7)^{\cdot 5}}{2^{\cdot 5}}$

$\frac{4x + 6}{10} - \frac{15x - 5}{10} = \frac{20x + 35}{10}$

$\frac{-11x + 1}{10 \cdot 10} = \frac{20x + 35}{10 \cdot 10}$

$-11x + 1 = 20x + 35$

$-11x - 20x = 35 - 1$

$\frac{-31x}{-31} = \frac{34}{-31}$

$x = \frac{-34}{31}$

#6

$$x^2 + y^2 + 8x = 6y$$

$$\Downarrow$$

$$(x^2 + 8x) + (y^2 - 6y) = 0$$

$$\left(\frac{8}{2}\right)^2 \quad \Downarrow \quad \left(\frac{6}{2}\right)^2$$

$$(x^2 + 8x + 16 - 16) + (y^2 - 6y + 9 - 9) = 0$$

$$(x^2 + 8x + 16) + (y^2 - 6y + 9) = 16 + 9$$

$$(x+4)^2 + (y-3)^2 = 25$$

$$\Downarrow$$

$$(x+4)^2 + (y-3)^2 = 5^2 \qquad \text{Rayon} = 5$$

$$\Downarrow$$

$$(x-(-4))^2 + (y-3)^2 \qquad \text{centre} = (-4, 3)$$