

$$a) (x; 0) \in d$$

$$\Leftrightarrow 0 = 5 + 2k \Leftrightarrow k = -\frac{5}{2}$$

$$\Leftrightarrow x = 2 + \left(-\frac{5}{2}\right) \cdot (-1)$$

$$\Leftrightarrow x = \frac{9}{2} \Rightarrow (4,5; 0) \in d$$

et $(4,5; 0) \in O_x$

$$b) (0; y) \in d$$

$$\Leftrightarrow 2 - k = 0 \Leftrightarrow k = 2 \Leftrightarrow y = 5 + 4 = 9$$

$$\Rightarrow (0; 9) \in d \text{ et } (0; 9) \in O_y$$

$$c) x = 7 \Rightarrow 7 = 2 - k \Leftrightarrow k = -5$$

$$\Rightarrow y = 5 + (-5) \cdot 2 = 5 - 10 = -5$$

$(7, -5)$

$$d) y = -2 \Rightarrow -2 = 5 + 2k \Leftrightarrow k = -\frac{7}{2}$$

$$\Rightarrow x = 2 + \left(-\frac{7}{2}\right) \cdot (-1)$$

$$= 2 + \frac{7}{2} = \frac{11}{2}$$

$$\left(\frac{11}{2}; -2\right)$$

$$e) (2; 2) \in d$$

$$\Rightarrow \begin{cases} 2 = 2 - k \\ 2 = 5 + 2k \end{cases} \Rightarrow 2 - k = 5 + 2k$$

$$\Leftrightarrow -3 = 3k \Leftrightarrow k = -1$$

$$\Rightarrow 2 = 3 \Rightarrow (3; 3) \in d$$

$$f) \begin{cases} 1 + l = 2 - k \\ -5 - 8l = 5 + 2k \end{cases}$$

$$\begin{cases} k + l = 1 \\ 2k + 8l = -10 \end{cases} \Rightarrow k = 1 - l$$

$$\Rightarrow 2(1-l) + 8l = -10$$

$$\Leftrightarrow 2 - 2l + 8l = -10$$

$$\Leftrightarrow 6l = -12$$

$$\Leftrightarrow l = -2$$

$$\Rightarrow x = 1 + (-2) = -1$$

$$y = -5 - 8(-2) = 11$$

Le point $(-1; 11)$ est

l'intersection des deux
droites.