

## Verbeterdeuntel

Oef. 4: Bereken de vergelijking v/d rechten van oef. 2 en 3

$$\textcircled{2} \text{ a) } y - 1 = 1(x - 0)$$
$$\Leftrightarrow y - 1 = x + 0$$
$$\Leftrightarrow y = x + 1$$

$$y - y_1 = a(x - x_1)$$

$$\text{b) } y - \frac{3}{2} = 2(x - 0)$$
$$y - \frac{3}{2} = 2x + 0$$
$$y = 2x + \frac{3}{2}$$

$$\text{c) } y - 1 = 1(x - 2)$$
$$\Leftrightarrow y - 1 = x - 2$$
$$\Leftrightarrow y = x - 2 + 1$$
$$\Leftrightarrow y = x - 1$$

$$\text{d) } y - 3 = -3(x - (-1))$$
$$y - 3 = -3x - 3$$
$$y = -3x - 3 + 3$$
$$y = -3x$$

$$\text{e) } y - 0 = \frac{1}{2}(x - (-2))$$
$$\Leftrightarrow y = \frac{1}{2}x + \frac{2}{2}$$
$$\Leftrightarrow y = \frac{1}{2}x + 1$$

$$\text{f) } y - \frac{3}{2} = \frac{3}{2}(x - 2)$$
$$\Leftrightarrow y - \frac{3}{2} = \frac{3}{2}x - \frac{6}{2}$$
$$\Leftrightarrow y = \frac{3}{2}x - \frac{6}{2} + \frac{3}{2}$$
$$\Leftrightarrow y = \frac{3}{2}x - \frac{3}{2}$$

$$\begin{aligned} \textcircled{3} \text{ a) } y-2 &= 2(x-1) \\ \Rightarrow y-2 &= 2x-2 \\ \Rightarrow y &= 2x-2+2 \\ \Rightarrow y &= 2x \end{aligned}$$

$$y-y_1 = a(x-x_1)$$

$$\begin{aligned} \text{b) } y-1 &= -2(x-(-2)) \\ \Rightarrow y-1 &= -2x-4 \\ \Rightarrow y &= -2x-4+1 \\ \Rightarrow y &= -2x-3 \end{aligned}$$

$$\begin{aligned} \text{c) } y + \frac{3}{2} &= \frac{15}{14}(x+2) \\ \Rightarrow y + \frac{3}{2} &= \frac{15}{14}x + \frac{30}{14} \\ \Rightarrow y &= \frac{15}{14}x + \frac{30}{14} - \frac{3}{2} \\ \Rightarrow y &= \frac{15}{14}x + \frac{30}{14} - \frac{21}{14} \\ \Rightarrow y &= \frac{15}{14}x + \frac{9}{14} \end{aligned}$$

## Verbetersleutel oefening 6

Zoek het snijpunt v/d rechte

$$\begin{array}{l|l} \text{a) } y = x + 2 \text{ en } y = -x & y = -(-1) \\ x + 2 = -x & y = 1 \\ \Leftrightarrow 2x = -2 & \\ \Leftrightarrow x = \frac{-2}{2} & (-1, 1) \\ \Leftrightarrow x = -1 & \end{array}$$

$$\begin{array}{l|l} \text{b) } y = 2x + 1 \text{ en } y = x - 3 & y = -4 - 3 \\ 2x + 1 = x - 3 & y = -7 \\ \Leftrightarrow 2x - x = -3 - 1 & \\ \Leftrightarrow x = -4 & (-4, -7) \end{array}$$

$$\begin{array}{l|l} \text{c) } y = 2x - 3 \text{ en } y = 5x + 6 & y = 2 \cdot (-3) - 3 \\ 2x - 3 = 5x + 6 & y = -6 - 3 \\ \Leftrightarrow 2x - 5x = 6 + 3 & y = -9 \\ \Leftrightarrow -3x = 9 & \\ \Leftrightarrow x = \frac{9}{-3} & (-3, -9) \\ \Leftrightarrow x = -3 & \end{array}$$