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$$\begin{cases} 2x - y = -9 & (1) \\ 5x + 2y = 0 & (2) \end{cases}$$

(1) ger

$$y = 2x + 9 \quad (1^*)$$

Insättning i (2) ger

$$5x + 2(2x + 9) = 0$$

$$5x + 4x + 18 = 0$$

$$9x + 18 = 0$$

$$9x = -18$$

$$x = -2$$

Insättning i (1*) ger

$$y = 2(-2) + 9 = -4 + 9 = 5$$

$$\underline{\underline{\text{Svar}}} \begin{cases} x = -2 \\ y = 5 \end{cases}$$

$$\left[\begin{array}{l} \text{Prövning av } \begin{cases} x = -2 \\ y = 5 \end{cases} \\ \text{Insättning i (1) ger} \\ \text{VL} = 2(-2) - 5 = -9 \\ \text{HL} = -9 \quad \text{ok!} \\ \text{Insättning i (2) ger} \\ \text{VL} = 5 \cdot (-2) + 2 \cdot (5) = 0 \\ \text{HL} = 0 \quad \text{ok!} \end{array} \right]$$

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(a) $x^2 - 4x - 45 = 0$

$$x = 2 \pm \sqrt{2^2 + 45}$$

$$x = 2 \pm \sqrt{49}$$

$$x = 2 \pm 7$$

$$x_1 = -5, \quad x_2 = 9$$

$$\underline{\underline{\text{Svar}}} \quad x_1 = -5, \quad x_2 = 9$$

(b) $(x+1)^2 = x+1$

$$x^2 + 2 \cdot x \cdot 1 + 1^2 = x + 1$$

$$x^2 + 2x + 1 = x + 1$$

$$x^2 + x = 0$$

$$x(x+1) = 0$$

$$x = 0 \quad \text{eller} \quad x + 1 = 0$$

$$x = -1$$

$$\underline{\underline{\text{Svar}}} \quad x_1 = 0, \quad x_2 = -1$$