

METODO DI SOSTITUZIONE

$$\begin{cases} 5x + 2y - 4 = 0 \\ 3x + 4y = 0 \end{cases} \Rightarrow \begin{cases} 5x = -2y + 4 \Rightarrow x = \boxed{-\frac{2}{5}y + \frac{4}{5}} \\ 3\left(-\frac{2}{5}y + \frac{4}{5}\right) + 4y = 0 \end{cases}$$

$$\begin{cases} x = -\frac{2}{5}y + \frac{4}{5} \\ -\frac{6}{5}y + \frac{12}{5} + 4y = 0 \Rightarrow \frac{-6y + 12 + 20y}{5} = 0 \cdot 5 \end{cases}$$

$$\begin{cases} \text{idem} \\ \frac{14y}{14} = -\frac{12}{14} \Rightarrow y = -\frac{6}{7} \end{cases} \Rightarrow \begin{cases} x = -\frac{2}{5} \cdot \left(-\frac{6}{7}\right) + \frac{4}{5} \\ y = -\frac{6}{7} \end{cases}$$

$$\begin{cases} x = \frac{12}{35} + \frac{4}{5} = \frac{12 + 28}{35} = \frac{40}{35} = \frac{8}{7} \\ y = -\frac{6}{7} \end{cases} \quad P\left(\frac{8}{7}; -\frac{6}{7}\right)$$

METODO DEL CONFRONTO (è una particolare sostituzione)

$$\begin{cases} y = \boxed{-\frac{5}{2}x + 2} \\ y = -\frac{3}{4}x \end{cases} \Rightarrow \begin{cases} -\frac{5}{2}x + 2 = -\frac{3}{4}x \\ y = -\frac{3}{4}x \end{cases} \Rightarrow \begin{cases} -\frac{5}{2}x + \frac{3}{4}x = -2 \\ \text{idem} \end{cases}$$

$$\begin{cases} \frac{-10 + 3}{4}x = -2 \Rightarrow -\frac{7}{4}x = -2 \Rightarrow x = -2 \cdot \left(-\frac{4}{7}\right) \Rightarrow x = \frac{8}{7} \\ y = -\frac{3}{4} \left(\frac{8}{7}\right) = -\frac{6}{7} \end{cases} \quad P\left(\frac{8}{7}; -\frac{6}{7}\right)$$