

## Metodo di Sostituzione

$$\begin{cases} 3x - 2y + 8 = 0 \\ 4x + 3y + 5 = 0 \end{cases} \quad \begin{cases} 3x = 2y - 8 \\ \text{idem} \end{cases} \quad \begin{cases} x = \frac{2}{3}y - \frac{8}{3} \\ 4\left(\frac{2}{3}y - \frac{8}{3}\right) = -3y - 5 \end{cases}$$

$$\begin{cases} \text{idem} \\ \frac{8}{3}y - \frac{32}{3} = -3y - 5 \end{cases} \quad \begin{cases} \text{idem} \\ \frac{8}{3}y + 3y = \frac{32}{3} - 5 \end{cases} \quad \begin{cases} \text{idem} \\ \frac{17}{3}y = \frac{17}{3} \end{cases}$$

$$\begin{cases} x = \frac{2}{3}(1) - \frac{8}{3} \\ y = 1 \end{cases} \quad \begin{cases} x = -\frac{6}{3} \\ y = 1 \end{cases} \quad \begin{cases} x = -2 \\ y = 1 \end{cases}$$

## Metodo del confronto

$$\begin{cases} 3x - 2y + 8 = 0 \\ 4x + 3y + 5 = 0 \end{cases} \quad \begin{cases} -2y = -3x - 8 \\ 3y = -4x - 5 \end{cases} \quad \begin{cases} y = \frac{3}{2}x + 4 \\ y = -\frac{4}{3}x - \frac{5}{3} \end{cases} \quad \begin{cases} \text{idem} \\ \frac{3}{2}x + 4 = -\frac{4}{3}x - \frac{5}{3} \end{cases}$$

$$\begin{cases} \text{idem} \\ \frac{3}{2}x + \frac{4}{3}x = -\frac{4}{3} - \frac{5}{3} \end{cases} \quad \begin{cases} \text{idem} \\ \frac{17}{6}x = -\frac{9}{3} \end{cases} \quad \begin{cases} y = \frac{3}{2}(-2) + 4 \\ x = -2 \end{cases} \quad \begin{cases} y = -\frac{6}{2} + 4 \\ x = -2 \end{cases}$$

$$\begin{cases} y = 1 \\ x = -2 \end{cases}$$

## Metodo di Cramer

$$\begin{cases} 3x - 2y + 8 = 0 \\ 4x + 3y + 5 = 0 \end{cases} \quad \begin{vmatrix} 3 & -2 \\ 4 & 3 \end{vmatrix} = 9 + 8 = 17$$

$$\begin{cases} 3x - 2y = -8 \\ 4x + 3y = -5 \end{cases} \quad x = \frac{\begin{vmatrix} -8 & -2 \\ -5 & 3 \end{vmatrix}}{17} = \frac{-24 - 10}{17} = \frac{34}{17} = 2$$

$$y = \frac{\begin{vmatrix} 3 & -8 \\ 4 & -5 \end{vmatrix}}{17} = \frac{-15 + 32}{17} = \frac{17}{17} = 1$$

(3, -5)

$$y = mx + q$$

(1, -2)

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

$$-5 = -\frac{3}{2} \cdot 3 + q$$

$$q = -\frac{9}{2} + 5$$

$$q = -\frac{1}{2}$$

$$m = \frac{\Delta y}{\Delta x} = \frac{-5 + 2}{3 - 1} = -\frac{3}{2}$$

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

COMPITI

p 233 N 85, 91, 92, 100, 101