Sistemes d'Equacions Lineals

Substitució

1. $\left.\begin{array}{l} 5x - y = 2 \\ 6x + 2y = 12 \end{array}\right\}$ $\left\{\begin{array}{l} x = 1 \\ y = 3 \end{array}\right.$

2. $\left.\begin{array}{l} 3x + 2y = 0 \\ 4x + y = -5 \end{array}\right\}$ $\left\{\begin{array}{l} x = -2 \\ y = 3 \end{array}\right.$

3. $\left.\begin{array}{l} 3x - 2\cdot(y + 2) = 5 \\ 3 - (x - 4y) = 5 + x \end{array}\right\}$ $\left\{\begin{array}{l} x = 5 \\ y = 3 \end{array}\right.$

4. $\left.\begin{array}{l} y + 2\cdot(3 - x) = 5 - 3y \\ x - (1 + 2y) = 3 - 2\cdot(1 + 2x) \end{array}\right\}$ $\left\{\begin{array}{l} x = \frac{3}{8} \\ y = -\frac{1}{16} \end{array}\right.$

5. $\left.\begin{array}{l} 2 - \frac{x+3}{5} = \frac{y-3}{2} - x \\ \frac{3}{4} - \frac{y-2x}{6} = \frac{x+1}{3} \end{array}\right\}$ $\left\{\begin{array}{l} x = -\frac{33}{16} \\ y = \frac{5}{2} \end{array}\right.$

Igualació

1. $\left.\begin{array}{l} 3x - 4y = 1 \\ -4x + 5y = -2 \end{array}\right\}$ $\left\{\begin{array}{l} x = 3 \\ y = 2 \end{array}\right.$

2. $\left.\begin{array}{l} -x + 4y = 7 \\ 3x - 2y = -6 \end{array}\right\}$ $\left\{\begin{array}{l} x = -1 \\ y = \frac{3}{2} \end{array}\right.$

3. $\left.\begin{array}{l} 2 - 3\cdot(x - 4) = 5 + 7y \\ 4y - 6 = 2 - (3 - x) \end{array}\right\}$ $\left\{\begin{array}{l} x = \frac{1}{19} \\ y = \frac{24}{19} \end{array}\right.$

4. $\left.\begin{array}{l} x + 3\cdot(y - 7) = 1 - (x + 2) \\ -(y + 10) + 4 = x + 5 \end{array}\right\}$ $\left\{\begin{array}{l} x = -53 \\ y = 42 \end{array}\right.$

5. $\left.\begin{array}{l} x - \frac{2+y}{3} = 1 + \frac{x-3}{2} \\ 4 + \frac{2x-y}{10} = \frac{3}{5} - \frac{y+1}{2} \end{array}\right\}$ $\left\{\begin{array}{l} x = -\frac{37}{8} \\ y = -\frac{119}{16} \end{array}\right.$

Reducció

1. $\left.\begin{array}{l} 3x - 2y = 0 \\ 2x + 3y = 13 \end{array}\right\}$ $\left\{\begin{array}{l} x = 2 \\ y = 3 \end{array}\right.$

2. $\left.\begin{array}{l} -x + 3y = 5 \\ 2x - y = -6 \end{array}\right\}$ $\left\{\begin{array}{l} x = -\frac{13}{5} \\ y = \frac{4}{5} \end{array}\right.$

3. $\left.\begin{array}{l} -(2y - x) + 3 = 7 - 2x \\ 5 - 2\cdot(x + 1) = x - (y + 2) \end{array}\right\}$ $\left\{\begin{array}{l} x = 2 \\ y = 1 \end{array}\right.$

4. $\left.\begin{array}{l} -2x + y - 4 = 1 - (x + 2y) \\ -3\cdot(x - 2y) + 1 = 0 \end{array}\right\}$ $\left\{\begin{array}{l} x = 11 \\ y = \frac{16}{3} \end{array}\right.$

5. $\left.\begin{array}{l} \frac{x-2}{3} - 7 = 1 - \frac{2x+y}{6} \\ 2y - \frac{1-3x}{4} = 7 - \frac{2x+y}{10} \end{array}\right\}$ $\left\{\begin{array}{l} x = \frac{2039}{149} \\ y = -\frac{408}{149} \end{array}\right.$