

SISTEMI DI EQUAZIONI LINEARI ( <i>Risolvere con il metodo di sostituzione</i> )
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| <b>1</b>  | $\begin{cases} 3x-5=2(y-1)-8 \\ 2(x-1)=3(1-2y)+9 \end{cases}$   | $\left[ \left( -\frac{1}{11}, \frac{26}{11} \right) \right]$ |
| <b>2</b>  | $\begin{cases} -[x-3(y-1)]+2x=3 \\ 2(3x-y)+3(1-x)=-12 \end{cases}$  | $[(-3,3)]$   |
| <b>3</b>  | $\begin{cases} x-2[y-(x+1)]=12 \\ 3x-2(y+3)=4 \end{cases}$  | $[indeterminato]$  |
| <b>4</b>  | $\begin{cases} 3x-2(y-1)=x+2(x-y) \\ x+4y=0 \end{cases}$  | $[impossibile]$  |
| <b>5</b>  | $\begin{cases} \frac{12x-7}{2} - \frac{3(2x+y)}{10} = \frac{7}{10} \\ \frac{2x+y}{3} = \frac{4}{9} + \frac{x+y}{2} \end{cases}$   | $\left[ \left( \frac{2}{3}, -2 \right) \right]$              |
| <b>6</b>  | $\begin{cases} \frac{1}{3} \left( \frac{x-2}{4} - \frac{y+1}{2} \right) = - \left( \frac{3x-2}{3} - \frac{y-3}{2} \right) + 3 \\ \frac{1}{2} [4x - (2y-x)] = \frac{1-y}{10} - \left( \frac{1}{5}x - \frac{23}{4} \right) \end{cases}$   | $\left[ \left( 2, -\frac{1}{2} \right) \right]$              |
| <b>7</b>  | $\begin{cases} y - \frac{2}{3}x = \frac{20}{9} \\ x + \frac{1}{6}(y-9x) - \frac{1}{3}(y+1) = -\frac{1}{2} \end{cases}$  | $\left[ \left( -\frac{1}{3}, 2 \right) \right]$              |
| <b>8</b>  | $\begin{cases} \frac{3x+1}{2} - \frac{2y-1}{3} = \frac{2}{3}(2x-y) + \frac{2+x}{6} \\ \frac{x}{3} - \frac{y}{2} = 1 \end{cases}$  | $[impossibile]$  |
| <b>9</b>  | $\begin{cases} \frac{x-1}{3} + \frac{y+2}{4} = \frac{5}{12} \\ 6x-6y=1 \end{cases}$   | $\left[ \left( \frac{1}{2}, \frac{1}{3} \right) \right]$     |
| <b>10</b> | $\begin{cases} \frac{x+y}{4} = \frac{x-y}{6} + \frac{3}{4} \\ \frac{x}{4} + y = 2 \end{cases}$  | $[(4,1)]$  |
| <b>11</b> | $\begin{cases} \frac{12}{5} \left[ \frac{1}{4} \left( x - \frac{y-2}{3} \right) - \frac{1}{6} \left( \frac{2x+1}{2} - y \right) \right] = y - \frac{7}{5} \\ \frac{1}{5} \left( x - \frac{y-3}{2} \right) - \frac{1}{2} \left( y + \frac{x-3}{5} \right) + \frac{3}{5} = 0 \end{cases}$ | $[(0,2)]$  |
| <b>12</b> | $\begin{cases} 3x+2y+z=4 \\ x-y+5=10 \\ x+z=2 \end{cases}$  | $[(3,-2,-1)]$  |
| <b>13</b> | $\begin{cases} x+y+z=1 \\ 2x+y-z=6 \\ x-y+2z=-5 \end{cases}$  | $[(1,2,-2)]$   |

$$14 \quad \begin{cases} \frac{1}{3}x - y + z = \frac{3}{2} \\ x + y - 2z = 0 \\ 2x - z = \frac{5}{2} \end{cases} \quad \left[ \left( \frac{3}{2}, \frac{-1}{2}, \frac{1}{2} \right) \right]$$

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$$15 \quad \begin{cases} \frac{4x-y}{6} + \frac{x}{4} = 1 \\ x + 2y = 12 \end{cases} \quad [(2,5)]$$

$$16 \quad \begin{cases} 3x + 2y = 4 \\ 2y - \frac{3}{2}(x+3) = -5 \end{cases} \quad \left[ \left( 1, \frac{1}{2} \right) \right]$$

$$17 \quad \begin{cases} \frac{1}{3} \left( x - \frac{y+1}{2} \right) - \frac{1}{2} \left( \frac{x+1}{3} - y \right) = -\frac{5}{4} \\ \frac{1}{2} \left[ x - 2 \left( \frac{y-2}{3} + 1 \right) \right] = 2x - \frac{1}{12} \end{cases} \quad \left[ \left( \frac{1}{2}, -3 \right) \right]$$

$$18 \quad \begin{cases} \frac{x-y}{4} + 2x = \frac{1}{2} \\ \frac{2x+y}{3} - \frac{y-x}{4} = \frac{1}{5} \end{cases} \quad \left[ \left( \frac{11}{50}, -\frac{1}{50} \right) \right]$$

$$19 \quad \begin{cases} \frac{y+1}{3} + \frac{1}{2}x = 4 \\ \frac{1}{2} - \frac{1}{6}(x+y) = \frac{2}{3}x - \frac{1}{3}y \end{cases} \quad \left[ \left( \frac{28}{13}, \frac{101}{13} \right) \right]$$

$$20 \quad \begin{cases} \frac{1-2x}{3} + \frac{1+y}{2} = \frac{5}{12} \\ \frac{x}{3} + \frac{1}{2}y = 2+x \end{cases} \quad [impossibile]$$