

$$3. \begin{cases} \frac{1}{x-1} + \frac{1}{y+4} = 0 \\ \frac{1}{3x+1} - \frac{1}{5y} = 0. \end{cases} \quad [-2; -1]; \quad \begin{cases} \frac{x+3}{y-5} = 5 \\ \frac{x-1}{y+3} = \frac{1}{9}. \end{cases} \quad [2; 6]$$

$$4. \begin{cases} \frac{5}{x-2y} = \frac{7}{2x-y} \\ \frac{3x-2}{7} = \frac{6+y}{5}. \end{cases} \quad [3; -1]; \quad \begin{cases} x+y = 16 \\ \frac{1}{x} + \frac{1}{y} = 2\left(\frac{1}{x} - \frac{1}{y}\right). \end{cases} \quad [4; 12]$$

$$5. \begin{cases} \frac{5}{x+2y} = \frac{7}{2x+y} \\ \frac{7}{3x-2} = \frac{5}{6-y}. \end{cases} \quad [3; 1]; \quad \begin{cases} \frac{15x+1}{45-y} = 8 \\ \frac{12y+19}{x-10} = 25. \end{cases} \quad [17; 13]$$

$$6. \begin{cases} \frac{3x+1}{4-2y} = \frac{4}{3} \\ x+y = 1. \end{cases} \quad [5; -4]; \quad \begin{cases} \frac{x+3y}{x-y} = 8 \\ \frac{7x-13}{3y-5} = 4. \end{cases} \quad [11; 7]$$

$$7. \begin{cases} \frac{1}{1-x} = \frac{1}{y+4} \\ \frac{1}{3x+1} = \frac{1}{5y}. \end{cases} \quad [-2; -1]; \quad \begin{cases} \frac{2x-y}{x-y} = \frac{8}{5} \\ \frac{2x+y}{x+1} = 4. \end{cases} \quad \left[-\frac{3}{2}; 1\right]$$

$$8. \begin{cases} \frac{x-3}{y-1} = 2 \\ \frac{x+y}{x-y} = 2. \end{cases} \quad [\text{Impossibile}]; \quad \begin{cases} \frac{3x-4y}{x+2y} = 7 \\ \frac{2(x-y)}{3x-5} = 1. \end{cases} \quad [9; -2]$$

$$9. \begin{cases} \frac{2x+1}{x-1} = \frac{y+3}{y-1} + \frac{5}{12} \\ \frac{2y+8}{y+1} = \frac{3x-1}{x-3} - \frac{19}{5}. \end{cases} \quad [5; 4]; \quad \begin{cases} \frac{2x+1}{x-4} = \frac{y+2}{y-1} + 1 \\ \frac{3x-1}{x-3} = \frac{2y+8}{y+1} + 1. \end{cases} \quad [7; 2]$$

$$10. \begin{cases} \frac{13}{x+2y+3} = -\frac{3}{4x-5y+6} \\ \frac{3}{6x-5y+4} = \frac{19}{3x+2y+1}. \end{cases} \quad [7; 8];$$

$$11. \begin{cases} \frac{x}{3y} + \frac{11}{10} = \frac{4x-5y}{5y} \\ x-4y = 7. \end{cases} \quad [63; 14]; \quad \begin{cases} \frac{x+y}{x-y} = 9 \\ \frac{2x-y}{3x+8} = \frac{6}{23}. \end{cases} \quad [5; 4]$$

$$12. \begin{cases} \frac{2x-3}{4y-5} - \frac{3x-4}{6y-7} = \frac{5}{2(4y-5)(7-6y)} \\ (x+1)(y-2) = (3-x)(4-y) - 1. \end{cases} \quad \left[\frac{3}{2}; \frac{5}{2}\right]$$

$$13. \begin{cases} \frac{7+8x}{10} - \frac{3x-6y}{2x-8} = 4 - \frac{9-4x}{5} \\ \frac{6y+9}{4} = \frac{13}{4} + \frac{3y+4}{2} - \frac{3y+5x}{4y-6}. \end{cases} \quad [9; 7]$$