

Aufgaben Gleichungssysteme

1.

$$\begin{array}{l} \text{a) I } 5y - 3x = 1 \\ \text{II } x = y + 1 \end{array}$$

$$\begin{array}{l} \text{d) I } 3x = y + 15 \\ \text{II } 2y - 10 = 2x \end{array}$$

$$\begin{array}{l} \text{f) I } \frac{x}{2} - \frac{3y}{5} = 3 \\ \text{II } \frac{x}{4} + y = 8 \end{array}$$

$$\begin{array}{l} \text{i) I } \frac{4}{3x+1} = \frac{2}{3y-13} \\ \text{II } \frac{2}{5x-10} = \frac{4}{7y-6} \end{array}$$

$$\begin{array}{l} \text{l) I } \frac{3}{2x-1} - \frac{8}{3y+2} = -\frac{1}{5} \\ \text{II } \frac{5}{2x-1} + \frac{4}{3y+2} = \frac{8}{15} \end{array}$$

2.

$$\begin{array}{l} \text{a) I } x + y = a + b \\ \text{II } x - y = a - b \end{array}$$

$$\begin{array}{l} \text{c) I } 2x + 5y = 2a + 5b \\ \text{II } 3x - 4y = 3a - 4b \end{array}$$

$$\begin{array}{l} \text{e) I } a^2x + by = a + b \\ \text{II } a^3x + by = a^2 - b \end{array}$$

$$\begin{array}{l} \text{g) I } ax - by = a^2 + b^2 \\ \text{II } bx + ay = a^2 + b^2 \end{array}$$

$$\begin{array}{l} \text{i) I } 2ax - 3by = 4b - 9a \\ \text{II } 3ax - 6by = 6b - 18a \end{array}$$

$$\begin{array}{l} \text{b) I } 4x + 5y = 32 \\ \text{II } y = 5x - 11 \end{array}$$

$$\begin{array}{l} \text{e) I } 2y = 2x - 40 \\ \text{II } 3x = 10 - 2y \end{array}$$

$$\begin{array}{l} \text{g) I } \frac{2x}{15} + \frac{7y}{12} = 3 \\ \text{II } \frac{7x}{25} - \frac{5y}{16} = \frac{3}{20} \end{array}$$

$$\begin{array}{l} \text{j) I } \frac{7}{x} - \frac{12}{y} = \frac{5}{6} \\ \text{II } \frac{4}{y} + \frac{5}{2} = \frac{9}{x} \end{array}$$

$$\begin{array}{l} \text{c) I } 15y - 4x = -50 \\ \text{II } x = y + 7 \end{array}$$

$$\begin{array}{l} \text{h) I } \frac{x+5}{y-7} = \frac{4}{3} \\ \text{II } \frac{x+2}{y-5} = \frac{5}{8} \end{array}$$

$$\begin{array}{l} \text{k) I } \frac{4}{x} + \frac{8}{y} = \frac{5}{3} \\ \text{II } \frac{2}{x} - \frac{4}{y} = -\frac{1}{6} \end{array}$$

$$\begin{array}{l} \text{m) I } \frac{7}{2x-5} - \frac{9}{7y+5} = \frac{10}{3} \\ \text{II } \frac{24}{2x-5} + \frac{15}{7y+5} = \frac{19}{3} \end{array}$$

3.

$$\begin{array}{l} \text{a) I } 3x + 2y - 4z = -2 \\ \text{II } 4x - 5y + 3z = 9 \end{array}$$

$$\text{III } 8x + 7y - 9z = 13$$

$$\text{I } \frac{1}{2}x + \frac{1}{4}y + \frac{1}{5}z = 8$$

$$\begin{array}{l} \text{c) II } \frac{1}{4}x + \frac{1}{8}y - \frac{1}{15}z = \frac{7}{2} \end{array}$$

$$\text{III } \frac{1}{10}x + \frac{1}{2}y + \frac{1}{2}z = 13$$

$$\text{I } 2x - 3y + 4z = 8$$

$$\begin{array}{l} \text{b) II } 3x + 4y - 5z = -4 \end{array}$$

$$\text{III } 4x - 6y + 3z = 1$$

$$\text{I } \frac{1}{2}x - \frac{4}{5}y + \frac{3}{8}z = 4$$

$$\begin{array}{l} \text{d) II } \frac{3}{4}x + \frac{3}{8}y + \frac{1}{5}z = 23 \end{array}$$

$$\text{III } \frac{4}{5}x - \frac{1}{2}y + \frac{1}{4}z = 8$$