

Übungsaufgaben: Lineare Gleichungssysteme lösen 2

$$(1) \quad \left| \begin{array}{l} -4 = -4b + 6a + 3c \\ -6d = 8 - 2a - c \\ 6d - c = 17 \\ 2a = 4d - c + 12 \end{array} \right|$$

$$(2) \quad \left| \begin{array}{l} -16 - 4p - 5n = 0 \\ -5n = 20 \\ 1 = -24p + 2m \end{array} \right|$$

$$(3) \quad \left| \begin{array}{l} 2 - 6q = -p - 4m - 4n \\ 2q = 22 \\ -16n = -4m + 4 \\ 0 = 4n - 14 \end{array} \right|$$

$$(4) \quad \left| \begin{array}{l} -3n + 3m = -4p - 5,5 \\ -p = 13 \\ -13,5 - 3n = -3p \end{array} \right|$$

$$(5) \quad \left| \begin{array}{l} -r + 2m = -16 \\ 10 - 6v = 4m - 3r \\ 6m - 2r + 6 = -3p \\ -15 = -3v \end{array} \right|$$

$$(6) \quad \left| \begin{array}{l} 4b - 10 = -3a \\ 6b = -6a - 6 \\ 0 = 2c - 18 \\ -4 - d - 8b - 6a + 4c = 0 \end{array} \right|$$

$$(7) \quad \left| \begin{array}{l} 0 = 28 + 2a \\ 18 - 3d = 0 \\ 3b + 24 = 0 \\ c = 25 - 6d \end{array} \right|$$

$$(8) \quad \left| \begin{array}{l} -24 = -4j \\ 4m = -4i - 8 \\ 4m - 8j = -20 \end{array} \right|$$

$$(9) \quad \left| \begin{array}{l} 4z = 20 + y \\ -3y - 4x + 12z = -4 \\ -2z = -14 \end{array} \right|$$

$$(10) \quad \left| \begin{array}{l} 4f = -18 + 4c - 5k \\ -14k = -4c \\ -k = 4 \end{array} \right|$$

Lösungen

- (1) $a = 25/2$ $b = 16$ $c = -5$ $d = 2$
 (2) $m = 25/2$ $n = -4$ $p = 1$
 (3) $m = 15$ $n = 7/2$ $p = -10$ $q = 11$
 (4) $m = -2$ $n = -35/2$ $p = -13$
 (5) $m = -14$ $p = 18$ $r = -12$ $v = 5$
 (6) $a = -14$ $b = 13$ $c = 9$ $d = 12$
 (7) $a = -14$ $b = -8$ $c = -11$ $d = 6$
 (8) $i = -9$ $j = 6$ $m = 7$
 (9) $x = 16$ $y = 8$ $z = 7$
 (10) $c = -14$ $f = -27/2$ $k = -4$