**LGS mit drei Variablen II**

**Bestimme x,y und z. Schreibe die Lösungsmenge.**

|  |  |
| --- | --- |
| I. 9x + 2y - 8z = 155II. 3x + 6y - 3z = 102III. 2x + 6y - 3z = 93**L = { 9; 9; -7}**II. 3x + 6y - 3z = 102III. 2x + 6y - 3z = 93II. - III.IV. x = 9I. 9x + 2y - 8z = 155 |·3II. 3x + 6y - 3z = 102I. 27x + 6y - 24z = 465 II. 3x + 6y - 3z = 102I. – II.V. 24x – 21z = 363Einsetzen x = 4:96 – 21z = 363 |-96-21z = 267 |:(-21) **z = -7**in III.18 + 6y + 21 = 93 |T 39 + 6y = 93 |-39 6y = 54 |:6 **y = 9** | I. x + 5y - 7z = -61II. 8x + 5y + 6z = -19III. 2x - 9y + 9z = 58**L = {-7 ; -1; 7}**I. – II.I. x + 5y - 7z = -61II. 8x + 5y + 6z = -19IV. -7x – 13z = -42I. x + 5y - 7z = -61 |·9III. 2x - 9y + 9z = 58 |·5I. 9x + 45y - 63z = -549III. 10x - 45y + 45z = 290I. + III.V. 19x – 18z = -259IV. -7x – 13z = -42 |·19V. 19x – 18z = -259 |·7IV. -133x – 247z = -798V. 133x – 126z = -1813IV. + V.-373z = -2611 |:(-373) **z = 7**in IV. -7x – 91 = -42 |+91 -7x = 49 |:(-7) **x = -7**in I.-7 + 5y - 49 = -61 |+56 5y = -5 |:5 **y = -1** |