**Einsetzungsverfahren V**

**Löse folgende Gleichungssysteme mit dem Einsetzungsverfahren.**

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| I. y = -12x - 87  II. x = -11y + 91  I. in II.  x = -11(-12x – 87) + 91 |T  x = 132x + 957 + 91 |T  x = 132x + 1048 |-1048 - x  -1048 = 131x |:131  x = -8  in I.  y = 96 – 87 = 9  L = {-8, 9} | I. y = 9x - 139  II. x = -5y - 5  I. in II.  x = -5(9x – 139) – 5 |T  x = -45x + 695 – 5 |T  x = -45x + 690 |+45x  46x = 690 |:46  x = 15  in I.  y = 135 – 139 = -4  L = {15, -4} |
| I. y = x + 2  II. x = 8y – 30  I. in II.  x = 8(x + 2) – 30 |T  x = 8x + 16 – 30 |T  x = 8x – 14 |-8x  -7x = - 14 |:(-7)  x = 2  in I.  y = 2 + 2 = 4  L = {2, 4} | I. y = -3x + 18  II. x = 15y - 132  I. in II.  x = 15(-3x + 18) + 18 |T  x = -45x + 270 + 18 |T  x = -45x + 288 |+45x  46x = 288 |:46  x = 3  in I.  y = -9 + 18 = 9  L = {3, 9} |
| I. y = -8x - 73  II. x + 11y= – 67 |-11y  II. x = -11y - 67  I. in II.  x = -11(-8x + 73) - 67 |T  x = 88x – 803 - 67 |T  x = 88x – 870 |-88x  -87x = -870 |:(-87)  x = 10  in I.  y = -80 – 73 = - 153  L = {10, -153} | I. y = 2x + 20  II. x + 23 = -6y |-23  II. x = -6y – 23  I. in II.  x = -6(2x + 20) - 23 |T  x = -12x – 120 - 23 |T  x = -12x – 143 |+12x  13x = - 143 |:13  x = - 11  in I.  y = -22 + 20 = -2  L = {-11, -2} |
| I. y - 27= -7x |+27  II. x = 12y + 186  I. y = -7x + 27  I. in II.  x = 12(-7x + 27) + 186  weiter wie oben:  L = {6, -15} | I. y + 2 = -2x |-2  II. x = 3y + 6  I. y = -2x - 2  I. in II.  x = 3(-2x – 2) + 6  weiter wie oben:  L = {0, -2} |