**Einsetzungsverfahren VI**

**Löse folgende Gleichungssysteme mit dem Einsetzungsverfahren.**

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| I. x + y = 4 |- y  II. 2x + 5y = 17  I. x = 4 - y  I. in II.  2(4 – y) + 5y = 17 |T  8 – 2y + 5y = 17 |T  8 + 3y = 17 |-8  3y = 9 |:3  y = 3  in I.  x = 4 – 3 = 1  L = {1, 3} | I. 5x + y = 24 |-5x  II. 3x + 6y = 36  I. y = -5x + 24  I. in II.  3x + 6(-5x + 24) = 36 |T  3x – 30x + 144 = 36 |T  -27x + 144 = 36 |+27x-36  108 = 27x |:27  x = 4  in I.  y = -20 + 24 = 4  L = {4, 4} |
| I. x + y = 12 |-x  II. 6x + 4y = 58  I. y = 12 - x  I. in II.  6x + 4(12 – x) = 58 |T  6x + 48 – 4x = 58 |T  2x + 48 = 58 |-48  2x = 10 |:2  x = 5  in I.  y = 12 – 5 = 7  L = {5, 7} | I. x + 4y = 43 |-4y  II. 8x + 2y = 74  I. x = 43 – 4y  I. in II.  8(43 – 4y) + 2y = 74 |T  344 – 32y + 2y = 74 |T  344 – 30y = 74 |-344  -30y = -270 |:(-30)  y = 9  in I.  x = 43 – 36 = 7  L = {7, 9} |
| I. x + 9y = 36 |-9y  II. 4x + 7y = 57  I. x = 36 - 9y  I. in II.  4(36 - 9y) + 7y = 57 |T  144 – 36y + 7y = 57 |T  144 – 29y = 57 |-144  -29y = -87 |:(-29)  y = 3  in I.  x = 36 – 27 = 9  L = {9, 3} | I. x + y = 8 |-x  II. 8x + 6y = 58  I. y = 8 - x  I. in II.  8x + 6(8 – x) = 58 |T  8x + 48 – 6x = 58 |T  2x + 48 = 58 |-48  2x = 10 |:2  x = 5  in I.  y = 8 – 5 = 3  L = {5, 3} |