**Gleichsetzungsverfahren IV**

**Löse folgende Gleichungssysteme mit dem Gleichsetzungsverfahren.**

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| I. y = -6x – 25  II. 15x + y = - 43 |-15x  I. y = -6x – 25  II. y = -15x - 43  -6x – 25 = -15x – 43 |+15x +25  9x = -18 |:9  x = -2  in I: y = 12 – 25 = -13  L = {-2, -13} | I. y - 30 = -4x |+30  II. y + 10x = 78 |-10x  I. y = -4x + 30  II. y = 78 – 10x  -4x + 30 = 78 – 10x |+10x-30  6x = 48 |:6  x = 8  in I: y = -32 + 30 = -2  L = {8, -2} |
| I. y = 15x + 157  II. y – 77 = 7x |+77  I. y = 15x + 157  II. y = 7x + 77  15x + 157 = 7x + 77 |-7x -157  8x = -80 |:8  x = -10  in I: y = -150 + 157 = 7  L = {-10, 7} | I. y = 7x - 76  II. y + 13x = 124 |-13x  I. y = 7x - 76  II. y = 124 – 13x  7x – 76 = 124 – 13x |+13x+76  20x = 200 |:20  x = 10  in I: y = 70 – 76 = -6  L = {10, -6} |
| I. -12 = -14x – y |+y + 12  II. y + 1 = -x |-1  I. y = -14x + 12  II. y = -x – 1  -14x + 12 = -x – 1 |+x - 12  -13x = -13 |:(-13)  x = 1  in II: y = -1 - 1 = -2  L = {1, -2} | I. y + 11 = 2x |-11  II. y = 5x - 5  I. y = 2x - 11  II. y = 5x - 5  2x – 11 = 5x – 5 |-2x + 5  -6 = 3x |:3  -2 = x  In II: y = -10 – 5 = -15  L = {-2, -15} |
| I. -36 = 12x – y |+y + 36  II. -5x = y - 2 |+2  I. y = 12x + 36  II. y = -5x + 2  12x + 36 = -5x + 2 |+5x - 36  17x = -34 |:17  x = -2  L = {-2, 12} | I. y + 2x = 0 |-2x  II. -5x = y + 6 |-6  I. y = -2x  II. y = -5x - 6  -2x = -5x – 6 |+5x  3x = - 6 |:3  x = - 2  in I: y = 4  L = {-2, 4} |