

Lösungen S. 67 Nr. 2 a) b) c) Additionsverfahren

2. a)
$$\begin{array}{l} \text{I} \\ \wedge \text{II} \end{array} \begin{array}{l} 4x + 3y = 17 \\ -x - 3y = -2 \end{array}$$

$$4x + \cancel{3y} - x - \cancel{3y} = 17 - 2$$

$$4x - x = 17 - 2$$

$$3x = 15 \quad | :3$$

$$x = 5$$

in I:

$$4 \cdot 3 + 3y = 17$$

$$3y = -3$$

$$y = -1 \quad \mathbb{L} = \{(5|-1)\}$$

b)
$$\begin{array}{l} \text{I} \\ \wedge \text{II} \end{array} \begin{array}{l} 5x + y = 13 \\ 2x = y + 1 \end{array} \quad | -y$$

$$\begin{array}{l} 5x + y = 13 \\ \wedge 2x - y = 1 \end{array}$$

$$5x + \cancel{y} + 2x - \cancel{y} = 13 - 1$$

$$7x = 14 \quad | :7$$

$$x = 2$$

in II:

$$2 \cdot 2 = y + 1$$

$$3 = y \quad \mathbb{L} = \{(2|3)\}$$

c)
$$\begin{array}{l} \text{I} \\ \wedge \text{II} \end{array} \begin{array}{l} 3x + 2y = 5 \\ -3x + 4y = -17 \end{array}$$

$$\cancel{3x} + 2y - \cancel{3x} + 4y = 5 - 17$$

$$6y = -12 \quad | :6$$

$$y = -2$$

in I:

$$3x + 2 \cdot (-2) = 5$$

$$3x = 9$$

$$x = 3 \quad \mathbb{L} = \{(3|-2)\}$$