

Lösungen Stufe B

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$$1) \quad 14,8 = -13x + 27,6 + 29x$$

$$14,8 = 16x + 27,6 \quad | -27,6$$

$$-12,8 = 16x \quad | :16$$

$$-0,8 = x \quad \mathbb{L} = \{-0,8\}$$

NR

$$\begin{array}{r} 27,6 \\ -14,8 \\ \hline 12,8 \end{array}$$

$$2) \quad 0,6a - 4 + 2,1a + 3,4 = 6 - 1,7a - 22 + 34$$

$$2,7a - 0,6 = -1,7a - 12,6 \quad | +1,7a \quad | +0,6$$

$$4a = -12 \quad | :4$$

$$a = -3 \quad \mathbb{L} = \{-3\}$$

$$3) \quad 3,4a - 12 - 14,4a + 4,6 = -13,2 - 5,2a$$

$$-11a - 7,4 = -13,2 - 5,2a \quad | +5,2a \quad | +7,4$$

$$-5,8a = -5,8 \quad | :(-5,8)$$

$$a = 1 \quad \mathbb{L} = \{1\}$$

$$4) \quad 1,6u - 2,4 = 1,2u + 2,4 \quad | -1,2u \quad | +2,4$$

$$0,4u = 4,8 \quad | :0,4$$

$$u = 12 \quad \mathbb{L} = \{12\}$$

$$5) \quad 6y - 10,5 - 5,5y + 13,2 = 5,5y - 44$$

$$0,5y + 2,7 = 5,5y - 44 \quad | -0,5y \quad |$$

$$2,7 = 5y - 44 \quad | +44$$

$$46,7 = 5y \quad | :5$$

$$9,34 = y \quad \mathbb{L} = \{9,34\}$$

$$6) \quad x^2 - 3,5x - 8x + 28 = x^2 - 7x - 12,5 \quad | -x^2$$

$$-11,5x + 28 = -7x - 12,5 \quad | +11,5x$$

$$28 = 4,5x - 12,5 \quad | +12,5$$

$$40,5 = 4,5x \quad | :4,5$$

$$9 = x \quad \mathbb{L} = \{9\}$$

$$7) (x^2 - 4,5x + 5,4x - 24,3) \cdot 2 = 2x^2$$

$$(x^2 + 0,9x - 24,3) \cdot 2 = 2x^2$$

$$2x^2 + 1,8x - 48,6 = 2x^2 \quad | -2x^2$$

$$1,8x - 48,6 = 0 \quad | +48,6$$

$$1,8x = 48,6 \quad | :1,8$$

$$x = 27$$

$$\mathbb{L} = \{27\}$$

$$8) y^2 - 3x + 2,25 = 2 \cdot (y^2 - 5y + 6,25) - (y^2 + y + 9,25)$$

$$\cancel{y^2} - 3x + 2,25 = 2\cancel{y^2} - 10y + 12,5 - \cancel{y^2} - y - 9,25 \quad | -y^2$$

$$-3x + 2,25 = -11y + 12,25 \quad | +11y \quad | -12,25$$

$$8x = 10 \quad | :8$$

$$x = 1,25$$

$$\mathbb{L} = \{1,25\}$$