**Lineare Gleichungen mit zwei Variablen – Übungen I**

**Forme um und bestimme die Lösungsmenge.**

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| **a) 2x - 5y = -6 |-2x** **- 5y = -2x - 6 |:(-5)** **y = 0,4x + 1,2****L = {(x|y)|y = 0,4x + 1,2}** | **b) - 2x + y = -2 |+2x** **y = 2x - 2****L = {(x|y)|y = 2x - 2}** |

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| **c) 3x - 9y = -21 |-3x** **- 9y = -3x - 21 |:(-9)** **y =** $\frac{1}{3}$**x – 2** $\frac{1}{3}$**L = {(x|y)|y =** $\frac{1}{3}$**x – 2** $\frac{1}{3}$**}** | **d) - 8x - 6y = -72 |+8x** **- 6y = 8x -72 |:(-6)** **y = - 1**$\frac{1}{3}$**x + 12****L = {(x|y)|y = - 1**$\frac{1}{3}$**x + 12}** |

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| **e) x + 6y = 30 |-x** **6y = -x + 30 |:6** **y = -**$\frac{1}{6}$**x + 5****L = {(x|y)|y = -**$\frac{1}{6}$**x + 5}** | **f) - 4x - y = -12 |+4x** **- y = 4x – 12 |:(-1)** **y = -4x + 12****L = {(x|y)|y = -4x + 12}** |

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| **g) 3x - 7y = -21 |-3x** **- 7y = -3x - 21 |:(-7)** **y =** $\frac{3}{7}$**x + 3****L = {(x|y)|y =** $\frac{3}{7}$**x + 3}** | **h) - 3x + 7y = 42 |+3x** **7y = 3x + 42 |:7** **y =** $\frac{3}{7}$**x + 6****L = {(x|y)|y =** $\frac{3}{7}$**x + 6}** |

**Zeichne die zugehörigen Graphen**

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