

## AB-Gleichungen lösen

3a)  $x = 1$

b)  $x_1 = 3$  ;  $x_2 = -1$

c)  $x_1 = 0$  ;  $x_2 = 0,5$

d)  $x(x-5) = 0 \Rightarrow x_1 = 0$  ;  $x_2 = 5$

e)  $r(r+1) = 0 \Rightarrow r_1 = 0$  ;  $r_2 = -1$

f)  $2t^2 = 50$  | :2

$$t^2 = 25 \quad | \sqrt{\quad}$$

$$t_1 = 5 \quad ; \quad t_2 = -5$$

g)  $2c^2 = c$  | -c

$$2c^2 - c = 0$$

$$c(2c - 1) = 0 \Rightarrow c_1 = 0 \quad ; \quad c_2 = \frac{1}{2}$$

h)  $3y^2 + 9y = 0$

$$3y(y + 3) = 0 \Rightarrow y_1 = 0 \quad ; \quad y_2 = -3$$

i)  $\sqrt{0,2} v^2 = \sqrt{5}$  | : $\sqrt{0,2}$

$$v^2 = 5 \quad | \sqrt{\quad}$$

$$v_1 = \sqrt{5} \quad ; \quad v_2 = -\sqrt{5}$$

j)  $-2t^2 - 3t = 0$

$$-t(2t + 3) = 0 \Rightarrow t_1 = 0 \quad ; \quad t_2 = -\frac{3}{2}$$

k)  $\frac{1}{2}a^2 = 1\frac{1}{2}a$  | - $1\frac{1}{2}a$

$$\frac{1}{2}a^2 - 1\frac{1}{2}a = 0$$

$$\frac{1}{2}a(a - 3) = 0 \Rightarrow a_1 = 0 \quad ; \quad a_2 = 3$$

l)  $3x^2 = 0,0867$  | :3

$$x^2 = 0,0289 \quad | \sqrt{\quad}$$

$$x_1 = 0,17 \quad ; \quad x_2 = -0,17$$

m)  $6z - z^2 = 9$  | + $z^2$  | - $6z$

$$0 = z^2 - 6z + 9 \quad (\text{evtl. Lösungsformel})$$

$$0 = (z - 3)^2 \Rightarrow z = 3$$

n)  $0,5q^2 + 0,5^2 = 0$  | - $0,5^2$  | : $0,5$

$$q^2 = -0,5 \quad | \sqrt{\quad}$$

$$q = \nmid \Rightarrow \text{Keine Lösung!}$$