

2) a) $x_{1,2} = \frac{1 \pm \sqrt{49}}{4}$ $x_1 = 2$ $x_2 = -1.5$

b) $x_{1,2} = \frac{7 \pm \sqrt{97}}{4}$ $x_1 = 4.212$ $x_2 = -0.712$

c) Keine Lösung, da Diskriminante $D = 3^2 - 4 \cdot 1 \cdot 4 = -7 < 0$

d) $y_{1,2} = \frac{4 \pm \sqrt{128}}{8}$ $y_1 = 1.914$ $y_2 = -0.914$

e) $z_{1,2} = \frac{18 \pm \sqrt{1764}}{10}$ $z_1 = 6$ $z_2 = -2.4$

(Die resultierende quadratische Gleichung lautet: $5z^2 - 18z - 72 = 0$)