

LÖSUNG ZU 940:

a)

$$x^2 + 17x + 72 = 0$$

$$x_{1,2} = -\frac{17}{2} \pm \sqrt{\left(\frac{17}{2}\right)^2 - 72} = -\frac{17}{2} \pm \sqrt{\frac{1}{4}} = -\frac{17}{2} \pm \frac{1}{2}$$

$$x_1 = -9 \quad x_2 = -8$$

$$L = \{-9; -8\}$$

c)

$$x^2 + 8x + 25 = 0$$

$$x_{1,2} = -4 \pm \sqrt{16 - 25} = -4 \pm \sqrt{-9} = -4 \pm 3i$$

$$x_1 = -4 - 3i \quad x_2 = -4 + 3i$$

$$L = \{-4 - 3i; -4 + 3i\}$$

e)

$$25x^2 - 10x + 1 = 0$$

$$x_{1,2} = \frac{10 \pm \sqrt{100 - 4 \cdot 25 \cdot 1}}{50} = \frac{10 \pm \sqrt{0}}{50} = \frac{10}{50} = \frac{1}{5} = 0,2$$

$$L = \{0,2\}$$

