

## Lösung Beispiel 350.) c)

$$x^2 + 2ax + \frac{15}{16}a^2 = 0$$

I kleine Lösungsformel anwenden

$$p = 2a$$

$$q = \frac{15}{16}a^2$$

$$x_{1,2} = -\frac{2a}{2} \pm \sqrt{\left(\frac{2a}{2}\right)^2 - \frac{15}{16}a^2}$$

$$x_{1,2} = -a \pm \sqrt{a^2 - \frac{15}{16}a^2}$$

$$x_{1,2} = -a \pm \sqrt{\frac{16}{16}a^2 - \frac{15}{16}a^2}$$

$$x_{1,2} = -a \pm \sqrt{\frac{1}{16}a^2}$$

$$x_{1,2} = -a \pm \frac{1}{4}a \quad \rightarrow x_1 = -a + \frac{1}{4}a = -\frac{3}{4}a \quad x_2 = -a - \frac{1}{4}a = -1\frac{1}{4}a$$

$$a = -2 \quad x_1 = -\frac{3}{4} \cdot (-2) = 1,5 \quad x_2 = -1\frac{1}{4} \cdot (-2) = 2,5 \quad L = \{1,5; 2,5\}$$

$$a = 0 \quad x_1 = -\frac{3}{4} \cdot 0 = 0 \quad x_2 = -1\frac{1}{4} \cdot 0 = 0 \quad L = \{0\}$$

$$a = 2 \quad x_1 = -\frac{3}{4} \cdot 2 = -1,5 \quad x_2 = -1\frac{1}{4} \cdot 2 = -2,5 \quad L = \{-1,5; -2,5\}$$

