

Lösung: Betrag

$$\begin{aligned} \text{a) } \left\| \begin{pmatrix} 6 \\ 0 \\ -8 \end{pmatrix} \right\| &= \sqrt{6^2 + 0^2 + (-8)^2} \\ &= \sqrt{36 + 0 + 64} \\ &= \sqrt{100} = 10 \end{aligned}$$

$$\begin{aligned} \text{b) } \left\| \begin{pmatrix} 1 \\ -1 \\ 4 \end{pmatrix} \right\| &= \sqrt{1^2 + (-1)^2 + 4^2} \\ &= \sqrt{1 + 1 + 16} = \sqrt{18} \end{aligned}$$