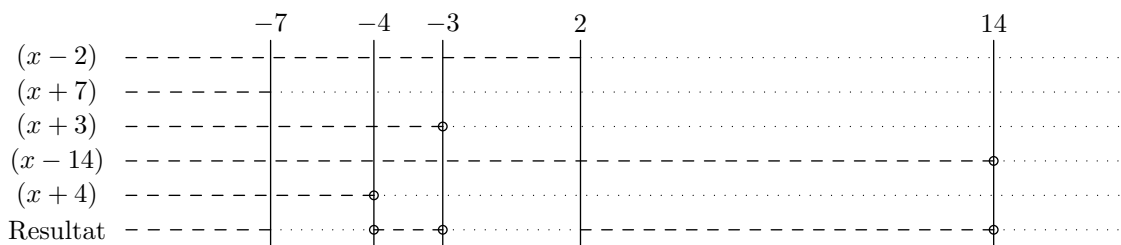


✂ Lösung zu Aufgabe 7.17 ex-ungleichungen-produkt-ungleich-null

a)

$$\begin{aligned} \frac{x}{x^2 - 11x - 42} + \frac{1}{x^2 + 7x + 12} &\leq 0 && | \text{TU} \\ \frac{x}{(x+3)(x-14)} + \frac{1}{(x+3)(x+4)} &\leq 0 && | \text{TU} \\ \frac{x(x+4) + (x-14)}{(x+3)(x-14)(x+4)} &\leq 0 && | \text{TU} \\ \frac{x^2 + 5x - 14}{(x+3)(x-14)(x+4)} &\leq 0 && | \text{TU} \\ \frac{(x-2)(x+7)}{(x+3)(x-14)(x+4)} &\leq 0 \end{aligned}$$



Man liest ab:  $\mathbb{L} = ] - \infty, -7] \cup ] - 4, -3[ \cup [2, 14[$ .