

# Analysis I WS 2019/20

## Kurztestbeispiele für 21.11.2019

Lösen Sie die Ungleichungen

$$\begin{array}{lll} (a) \quad \frac{2}{x+1} > \frac{1}{2x-1}, & (b) \quad \frac{3}{x-\frac{1}{2}} < \frac{1}{\frac{3}{2}x-1}, & (c) \quad \frac{\frac{1}{2}}{2x+1} \geq \frac{4}{x-\frac{3}{2}}, \\ (d) \quad \frac{2x-1}{x+1} > \frac{2x+1}{x-1}, & (e) \quad \frac{x-\frac{1}{2}}{2x-1} \leq \frac{\frac{1}{2}x}{x+2}, & (f) \quad \frac{3x-2}{x+2} \geq \frac{3x+2}{x-2}. \end{array}$$

$$\begin{array}{lll} (a) \quad \mathbb{L} = (-1; \frac{1}{2}) \cup (1; \infty), & (b) \quad \mathbb{L} = (-\infty; \frac{1}{2}) \cup (\frac{2}{3}; \frac{5}{7}), & (c) \quad \mathbb{L} = (-\infty; -\frac{19}{30}] \cup (-\frac{1}{2}; \frac{3}{2}), \\ (d) \quad \mathbb{L} = (-\infty; -1) \cup (0; 1), & (e) \quad \mathbb{L} = (-\infty; -2), & (f) \quad \mathbb{L} = (-\infty; -2) \cup [0; 2). \end{array}$$