

Analysis I WS 2019/20
Kurztestbeispiele für 24.10.2019

Lösen Sie die folgenden Gleichungen

$$\begin{array}{lll} a) & |x - 1| + |2x - 1| = 3, & b) & |x + 1| + |-2x + 1| = 3, & c) & \left|1 - \frac{x}{3}\right| + |x - 2| = 4, \\ d) & |2 - x| - |2 + x| = 1, & e) & |x - 2| + |2x - 5| = 3, & f) & |x + 1| + |x - 1| = 2. \end{array}$$

Die Lösungsmengen

$$\begin{array}{lll} a) & \mathbb{L} = \left\{\frac{5}{3}; -\frac{1}{3}\right\}, & b) & \mathbb{L} = \{1; -1\}, & c) & \mathbb{L} = \left\{\frac{21}{4}; -\frac{3}{4}\right\}, \\ d) & \mathbb{L} = \left\{-\frac{1}{2}\right\}, & e) & \mathbb{L} = \left\{\frac{10}{3}; \frac{4}{3}\right\}, & f) & \mathbb{L} = [-1; 1] \text{ (das ganze Intervall)}. \end{array}$$