

Quadratische Ungleichungen (Lsg.)

Aufgabe 1

$$a) -(4+x)(x-2) \leq 0; L = \mathbb{R} \setminus]-4; 2[$$

$$b) \frac{1}{2} \cdot 4(x+3)(x-\frac{5}{8}) > 0; L = \mathbb{R} \setminus [-3; \frac{5}{8}]$$

$$c) -2(x-4)(x-5) < 0; L = \mathbb{R} \setminus [4; 5]$$

$$d) -3(x+6)(x-2) \geq 0; L = [-6; 2]$$

$$e) -2 \cdot 3(x+\frac{1}{3})(x-2) < 0; L = \mathbb{R} \setminus [-\frac{1}{3}; 2]$$

$$f) 2 \cdot 4(x+\frac{25}{4})(x-25) > 0; L = \mathbb{R} \setminus [-\frac{25}{4}; 25]$$

$$g) 8x(x+\frac{1}{2}) < 0; L =]-\frac{1}{2}; 0[$$

$$h) -2x(x+3) > 0; L =]-3; 0[$$

Aufgabe 4

$$a) L = \mathbb{R}$$

$$b) L = \{ \}$$

$$c) (x-2)^2 + 1 > 0; L = \mathbb{R}$$

$$d) L = \{ \}$$

$$e) \frac{2}{5}(x-\frac{25}{8})^2 + \frac{19}{32} > 0; L = \mathbb{R}$$

$$f) -5(x+2)^2 - 5 > 0; L = \{ \}$$