3b) $-9x - 4 < 11 + x$

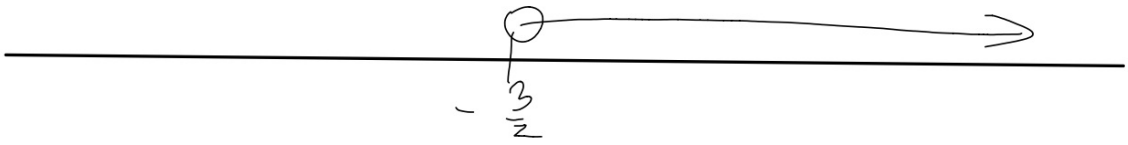
$-4 - 11 < x + 9x$

$-15 < 10x \;/:10$

$-\frac{3}{2} < x$

$x > -\frac{3}{2}$

$x \in \left(-\frac{3}{2}; +\infty\right)$



3c) $\frac{6x-5}{-3} + x > -x \quad / -x$

$\frac{6x-5}{-3} > -2x \quad / \cdot(-3)$

$6x - 5 < 6x \quad / -6x$

$-5 < 0 \cdot x$

$2 < 0 \cdot x$

$2 < 0 \quad K = \emptyset$

$K = \mathbb{R}$

4a) $4x-2>0$

$5-x \geq 2x-1$

$4x-2>0$

$4x>2$

$x>\frac{1}{2}$

$K=\left(\frac{1}{2};2\right\rangle$

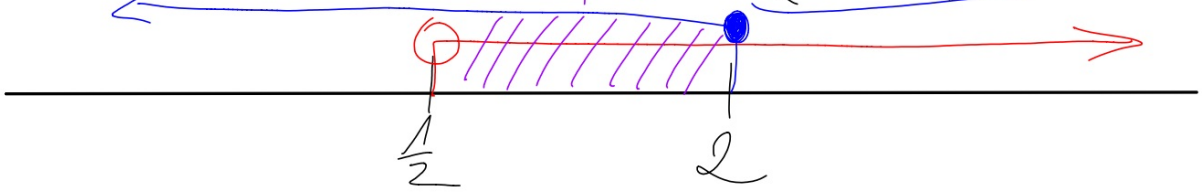
$x\in\left(\frac{1}{2};2\right\rangle$

$5-x \geq 2x-1 \;/+x$

$5 \geq 3x-1 \;/+1$

$6 \geq 3x \;/:3$

$2 \geq x$



4b) $1-x \leq 1$

$2x+2 > 0$

$1-x \leq 1 \;/-1$

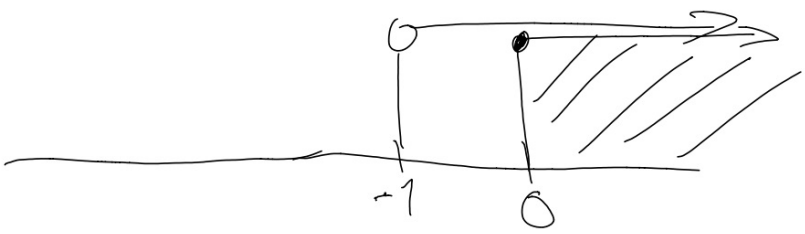
$-x \leq 0$

$x \geq 0$

$2x+2 > 0 \;/-2$

$2x > -2$

$x > -1$



$K = (0; \infty)$

4d) $3x - 5 > 1$

$-1 - x \geq 0$

$-1 - x \geq 0 \;/+x$

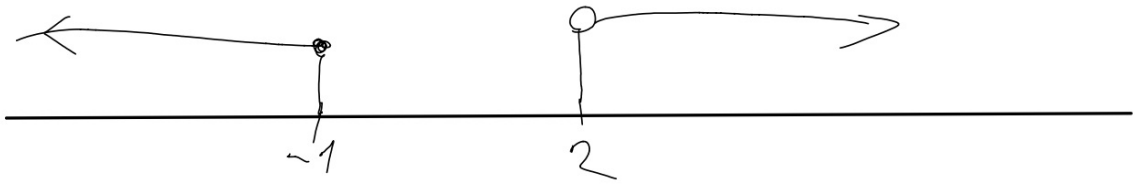
$-1 \geq x$

$3x - 5 > 1 \;/+5$

$3x > 6 \;/:3$

$x > 2$

$K = \emptyset$



b) $\frac{5}{2}x - 1 \geq 0$

$2(6-x) < -2x$

$\frac{5}{2}x - 1 \geq 0 \quad /+1$

$\frac{5}{2}x \geq 1 \quad /\cdot 2$

$5x \geq 2 \quad /:5$

$x \geq \frac{2}{5}$

$12 - 2x < -2x \quad /+2x$

$12 < 0 \cdot x$

$12 < 0,$

nemá řešení

$K = \emptyset$

Pć $\frac{x^2-5x}{x} \leq 0$

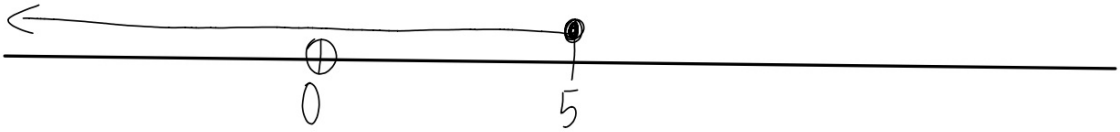
$x \neq 0$

$\frac{x(x-5)}{x} \leq 0$

$x-5 \leq 0$

$x \leq 5$

$K = (-\infty, 0) \cup (0, 5\rangle$



Pr $\frac{x^2-4}{x+2} < 0$ $\quad x \neq -2$

$\frac{(x+2)(x-2)}{(x+2)} < 0$

$x-2 < 0$

$x < 2$

$K = (-\infty; -2) \cup (-2; 2)$

