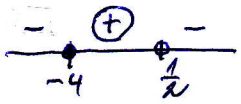
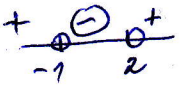
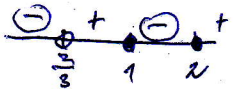
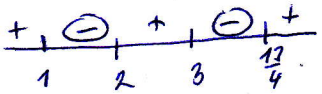
Řešte v R nerovnice:

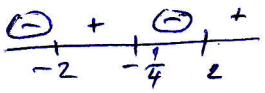
1. $\frac{x+4}{1-2x} \geq 0$  $\langle -4, \frac{1}{2})$

2. $\frac{2x-1}{x+1} < 1$ $\frac{2x-1-x-1}{x+1} < 0$ $\frac{x-2}{x+1} < 0$  $(-1;2)$

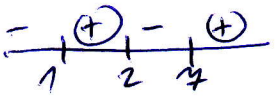
3. $\frac{x+1}{x-2} > \frac{3}{x-2} - \frac{1}{2}$ $\frac{3x-6}{2(x-2)} > 0$ $\frac{3}{2} > 0$ $R - \{2\}$

4. $\frac{x^2}{3x-2} \leq 1$ $\frac{x^2-3x+2}{3x-2} \leq 1$ $\frac{(x-2)(x-1)}{3x-2} \leq 0$  $(-\infty, \frac{2}{3}) \cup \langle 1;2 \rangle$

5. $\frac{5-x}{3-x} < \frac{3x-1}{2-x}$ $\frac{4x^2-17x+13}{(3-x)(2-x)} < 0$  $(1,2) \cup (3, \frac{13}{4})$

6. $\frac{1+x^3}{x^2-4} < x$ $\frac{1+4x}{(x-2)(x+2)} < 0$  $(-\infty,-2) \cup (-\frac{1}{4}, 2)$

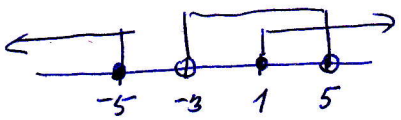
7. $\frac{7}{x^2-5x+6} + \frac{9}{x-3} + 1 \leq 0$ $\frac{(x+5)(x-1)}{(x-2)(x-3)} \leq 0$  $\langle -5,1 \rangle \cup (2,3)$

8. $\frac{2x-8}{x^2-8x+7} \geq \frac{1}{x-2}$ $\frac{x^2-4x+9}{(x-1)(x-7)(x-2)} \geq 0$  $(1,2) \cup (7, +\infty)$

9. $\frac{1-2x}{1+x} - \frac{1+x}{1+2x} \geq 1$ $\frac{4x^2+5x+1}{(1+x)(1+2x)} \leq 0$  $(-1, -\frac{1}{2})$

10. $x^8 - 6x^7 + 9x^6 - x^2 + 6x - 9 < 0$
$x^6(x^2-6x+9) - (x^2-6x+9) < 0$
$(x-3)^2(x^6-1) < 0$
$(x-3)^2 \cdot (x^3-1)(x^4+x^2+1) < 0$
 $(-1,1)$

11. $|x-4||x+3| > 0$ $R - \{-3; 4\}$

12. $|x+2| \geq 3 \wedge |x-1| < 4$  $\langle 1,5)$

13. $\frac{-2}{x^2-x+2} \leq 0$ $x^2-x+2 > 0$ R

14. $(3-x)^2|2x+3| \leq 0$ $\{3; -\frac{3}{2}\}$