Wart m dla ktorych $4x^2 - 2(m+1)x + m$ ma 2 rozne pierw $x_1 \neq 0, x_2 \neq 0, x_1 + x_2 \leq \frac{1}{x_1} + \frac{1}{x_2}$

① $\Delta > 0$

$\Delta = 4m^2 - 8m + 4$

$\Delta_m = 0 \quad m = \frac{8}{8} = 1$

$m \neq 1$

② $x_1 x \neq 0$ $\quad x_1 + x_2 \neq 0$

$\frac{c}{a} \neq 0$ $\quad \frac{-b}{a} \neq 0$

$\frac{m}{4} \neq 0$ $\quad \frac{2m+2}{4} \neq 0$

$m \neq 0$ $\quad m \neq -1$

③ $x_1 + x_2 - \frac{x_1 + x_2}{x_1 x_2} \leq 0$

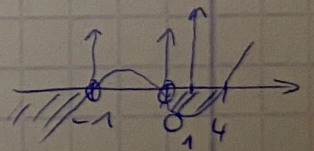
$x_1 x_2 = \frac{m}{4}$

$x_1 + x_2 = \frac{m+1}{2}$

$\frac{(x_1 + x_2) x_1 x_2 - (x_1 + x_2)}{x_1 x_2} \leq 0$

$\frac{(x_1 + x_2)[x_1 x_2 - 1]}{x_1 x_2} \leq 0$

$\frac{(m+1)(m-4)}{m} \leq 0$



$m \in (-\infty, -1) \cup (0, 4\rangle$

$m \in (-\infty, -1) \cup (0, 1) \cup (1, 4\rangle$