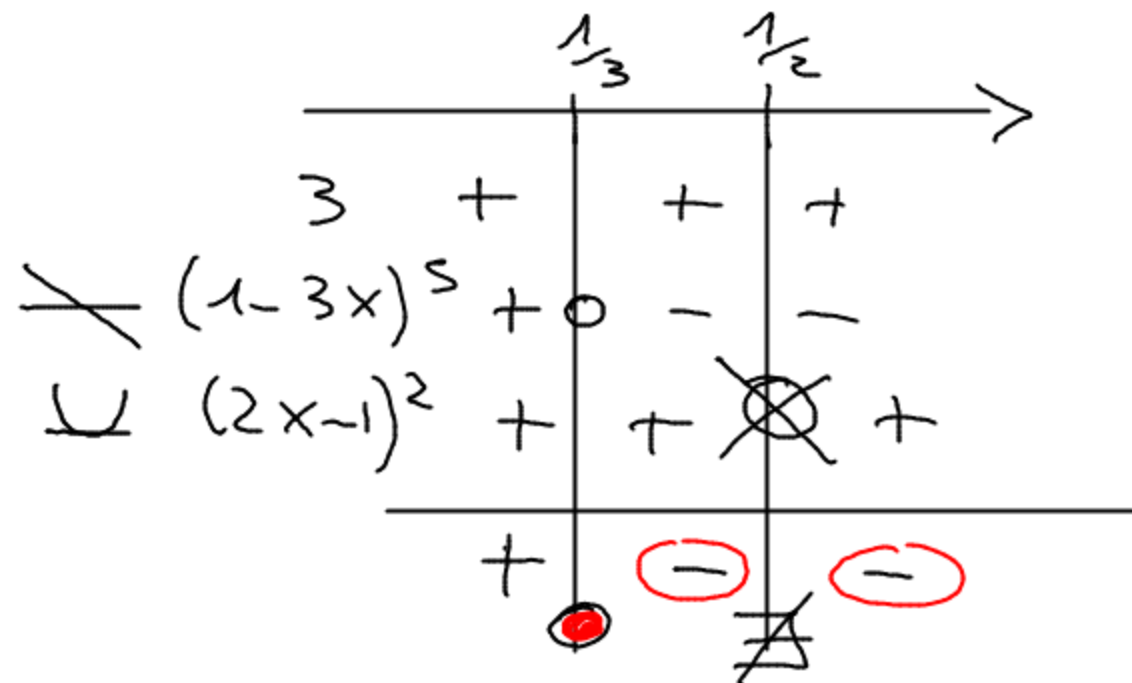


$$\frac{3(1-3x)^5}{4x^2-4x+1} \leq 0$$

$$\frac{3(1-3x)^5}{(2x-1)^2} \leq 0$$

I fattori con esponente  
dispari hanno lo stesso  
segno delle basi  
cioè  $(1-3x)^5$  ha lo  
stesso segno di  $1-3x$

I fattori con esponente PARI  
sono sempre positivi  
tranne che nei punti dove  
sono = 0



$$\frac{1}{3} \leq x < \frac{1}{2} \vee x > \frac{1}{2}$$

$$\left[\frac{1}{3}; \frac{1}{2} [ \cup ] \frac{1}{2}; +\infty [$$

$$\frac{1}{x} < \frac{x-1}{x^2+x+1}$$

$$\frac{1}{x} - \frac{x-1}{x^2+x+1} < 0$$

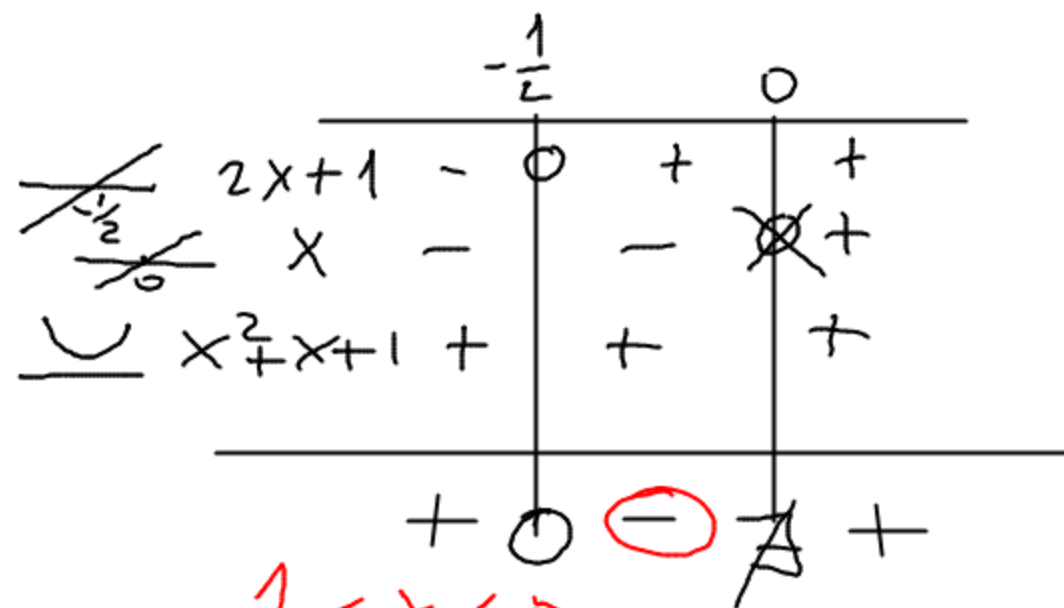
$$\frac{x^2+x+1 - x^2+x}{x(x^2+x+1)} < 0$$

$$\frac{2x+1}{x(x^2+x+1)} < 0$$

$$2x+1=0 \Rightarrow x = -\frac{1}{2}$$

$$x=0$$

$$x^2+x+1=0 \quad \Delta = 1-4 < 0$$

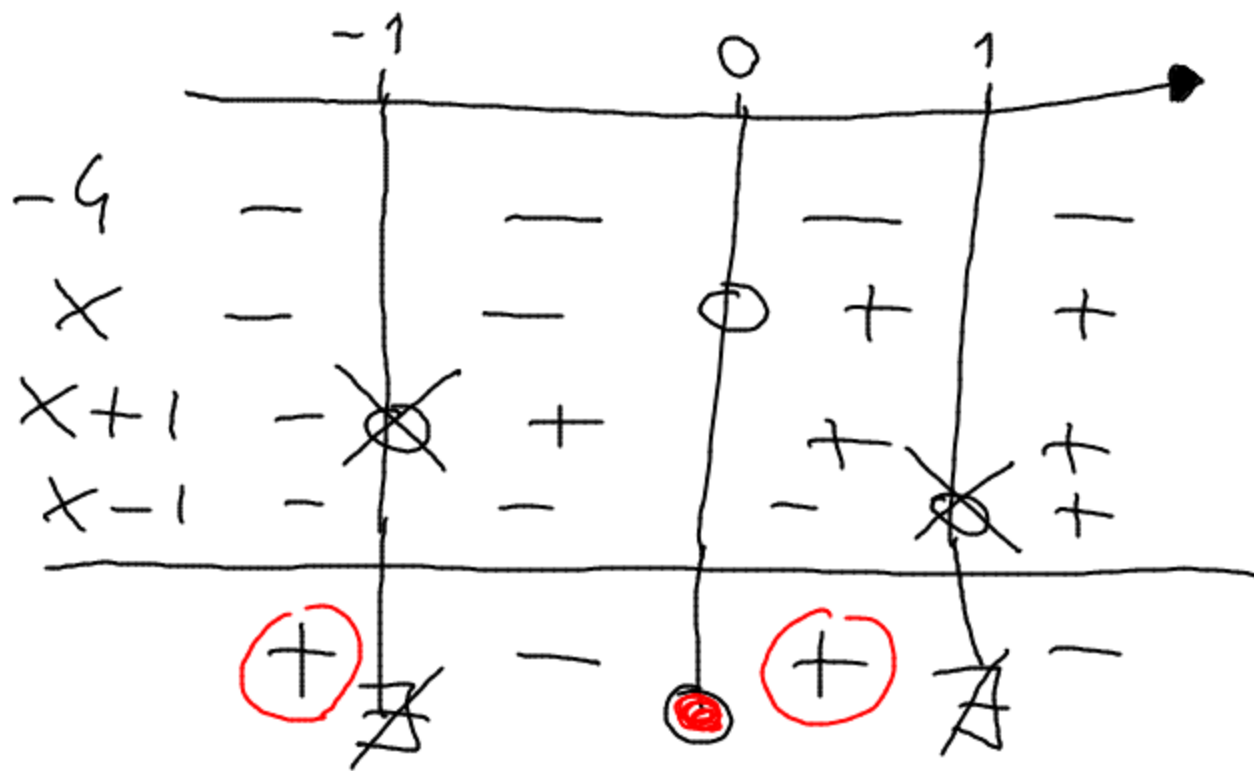


$$\frac{x-1}{x+1} - \frac{x+1}{x-1} \geq 0$$

$$\frac{x^2+1-2x - (x+1)^2}{(x+1)(x-1)} \geq 0$$

$$\frac{\cancel{x^2}+1-2x-\cancel{x^2}-2x}{(x+1)(x-1)} \geq 0$$

$$\frac{-4x}{(x+1)(x-1)} \geq 0$$

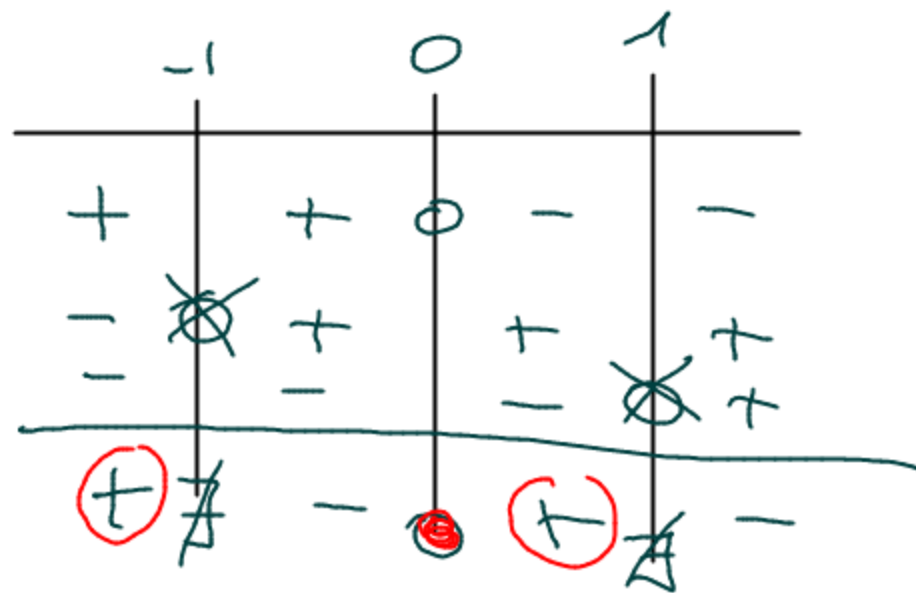


$$x < -1 \vee 0 \leq x < 1$$

$$]-\infty; -1[ \cup [0; 1[$$

Oppure

$$\frac{-4x}{(x+1)(x-1)}$$



S=