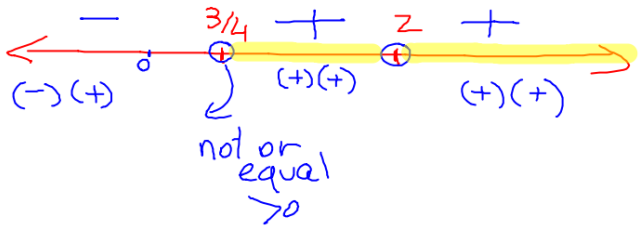
Section 2.8 : Solving inequalities in one variable.

$(4x-3)(x-2)^2 > 0$ (positive)

$(4x-3)$ positive



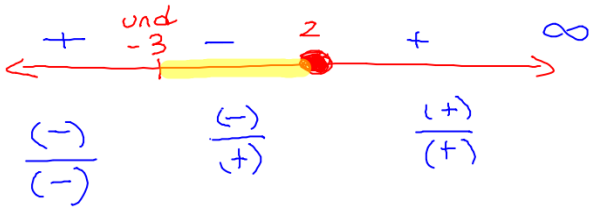
not or equal >0

- factored form
- look for zeros.

$\left(\frac{3}{4}, 2\right) \cup (2, \infty)$

Ex 1 : $\frac{x-2}{x+3} \leq 0$ (negative or equal to 0)

$x \neq -3$ (V.A at -3)



- Let $N = 0$
  $D = 0$

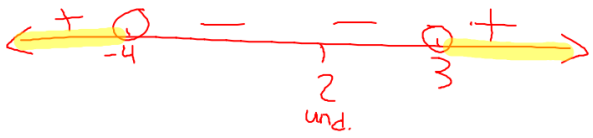
solution $x \in (-3, 2]$

Ex 2 $\frac{x^2+x-12}{x^2-4x+4} > 0$ (positive)

$\frac{(+)(-)}{(-)(-)}$ $\frac{(x+4)(x-3)}{(x-2)(x-2)} > 0$

$x \neq 2$

- Factor N & D
- Let $N = 0$ → zeros x-int
  $D = 0$ → undefined values



$(-\infty, -4) \cup (3, \infty)$

Hw: p242 7, 9, 10 / (33 → 43 odd)