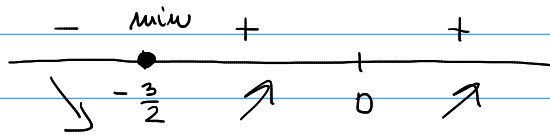
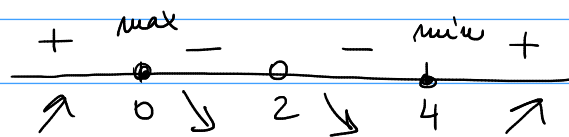


Homework 4 - solution

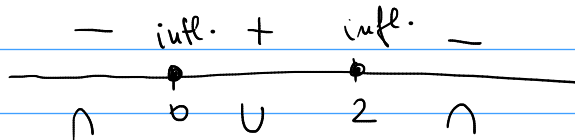
① a) $y = x^4 + 2x^3$
 $y' = 4x^3 + 6x^2 = 2x^2(2x + 3) = 0$



b) $y = \frac{x^2}{x-2}$ | $y' = \frac{x^2 - 4x}{(x-2)^2} = \frac{x(x-4)}{(x-2)^2}$



② a) $y = 4x^3 - x^4$
 $y' = 12x^2 - 4x^3$
 $y'' = 24x - 12x^2 = 12x(2-x)$



b) $y = x^3 - 2x^2 + x$
 $y' = 3x^2 - 4x + 1$
 $y'' = 6x - 4$

