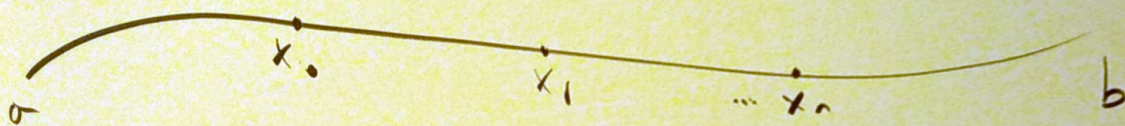THE CORE OF POLYNOMIAL INTERPOLATION ERROR
  IS THAT,
IF f IS DEFINED IN A PARTICULAR INTERVAL,
OF WHICH DISTINCT POINTS OF f EXIST,

a x_0 x_1 ... x_n b

AND $P_n(x)$ IS A POLYNOMIAL INTERSECTING THESE POINTS,
(IF $P_n(x)$ MEETS ALL THESE POINTS, THEN ITS DEGREE, THAT
    IS THE NUMBER (+1) OF CHANGES IN RELATIVE CHANGES,
(OF A MAGNITUDE OF
(ONE TYPE PER A MAGNITUDE OF ANOTHER, RESPECTIVELY...)

                                        DIFFERENTIALS
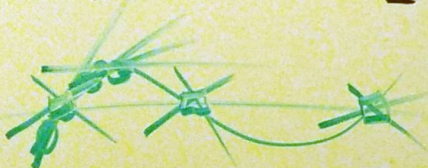
                    ... EXPRESSED BY THIS FUNCTION,
                    CAN BE NO GREATER THAN A
PARTICULAR NUMBER... n (DEGREE $\leq n$)
THEN THERE MUST BE SOME POINT ON $P_n(x)$ SUCH THAT
THE TRUE MAGNITUDE OF f IS THE SAME AS THE
EXPRESSED MAGNITUDE OF P. ASIDE FROM SOME OTHER
VALUE OF THE SAME MAGNITUDE AT THE SAME POINT
$\longrightarrow$ $\left(f(x) = P_n(x) + \dfrac{f^{(n+1)}(\xi_x)}{(n+1)!}(x-x_0)(x-x_1)\cdots(x-x_n) \right)$