$\textbf{Sats 0.0.1} \ \, \textbf{Om} \ \, f \ \, \text{\"{ar} deriverbar} \ \, \textbf{2} \ \, \text{\r{ganger} i ett intervall som innehåller} \, \, a \ \, \text{och} \, \, x \ \, \text{\r{sa}} \, \, \text{\r{galler} f\"{or}} \, \, \text{\r{nagot}} \, \, c \ \, \text{mellan} \, \, a \\ \, \text{och} \, \, x \, \, \text{\r{att} f\"{oljande}} \, \, \text{\r{galler}} \, \,$ 

$$f(x) = f(a) + f'(a)(x - a) + \frac{f''(c)}{2!}(x - a)^2$$