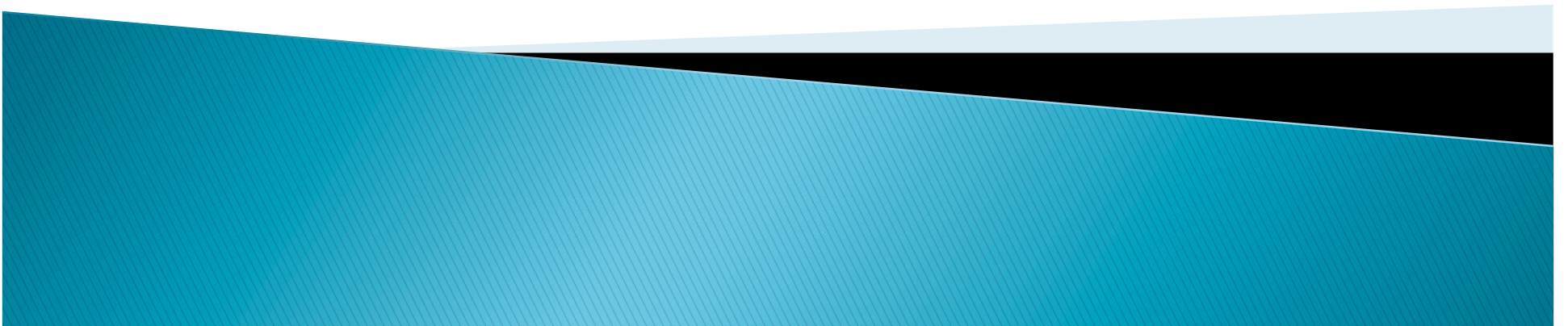


Calculus II Review

Wednesday, July 28, 2010

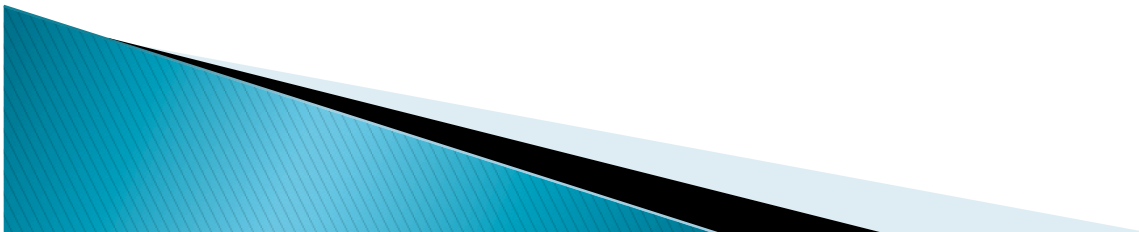


Taylor polynomials

- ▶ The Taylor polynomial for function f centered at $x = a$ is the polynomial:

$$T_n(x) = \sum_{j=0}^n \frac{f^{(j)}(a)}{j!} (x - a)^j$$

- ▶ where $f^{(j)}$ is the j -th derivative of the function and $f^{(0)}$ is the original function



Maclauren polynomials

- ▶ The Maclauren polynomial is the Taylor polynomial for $a = 0$

$$T_n(x) = \sum_{j=0}^n \frac{f^{(j)}(0)}{j!} x^j$$

