SECTION 11.11 THE BINOMIAL SERIES

- If k is any real number and $|x|<1$, then $(1+x)^k = \sum_{n=0}^{\infty} \binom{k}{n} x^n$, where $\binom{k}{n} = \frac{k(k-1)\cdots(k-n+1)}{n!}$ $(n \geq 1)$ and $\binom{k}{0} = 1$
- By the Ratio Test, the binomial series converges if $|x|<1$ and diverges if $|x|>1$, (See page 763 for this derivation)

SECTION 11.12 APPLICATIONS OF TAYLOR POLYNOMIALS

Review this section for applications of Taylor Polynomials, as well as properties.

GOOD LUCK ON THE EXAM!