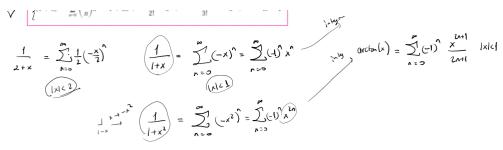
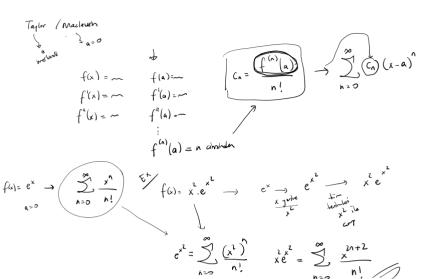


f(x) - power sules representation





4. Find the Taylor series for
$$f$$
 centered at f if
$$\int_{a}^{(a)} (4) = \frac{(-1)^{a} \pi}{3^{a} (n+1)}$$

$$\int_{a}^{(a)} (x-\xi_{1})^{a} (x-\xi_{2})^{a} (x-\xi_{1})^{a} (x-\xi_{2})^{a}$$

absolute convergence?
$$\Rightarrow 1 < x < 7$$

$$\lim_{N\to\infty}\left|\frac{a_{n+1}}{a_n}\right| = \lim_{N\to\infty}\left|\frac{\frac{x^{-1}}{x^{-1}}}{\frac{x^{-1}}{x^{-1}}}\right| = \lim_{N\to\infty}\left|\frac{\frac{x^{-1}}{x^{-1}}}{\frac{x^{-1}}{x^{-1}}}\right| = \lim_{N\to\infty}\left|\frac{\frac{x^{-1}}{x^{-1}}}{\frac{x^{-1}}{x^{-1}}}\right| = \lim_{N\to\infty}\left|\frac{x^{-1}}{x^{-1}}\right| = \lim_{N\to\infty}\left|\frac{x^{-1}}{x^{-1}}\right$$

$$\lim_{N\to\infty} \left| \frac{a_{n+1}}{a_n} \right| = \lim_{N\to\infty} \left| \frac{(-1)^n (x-1)^n}{3^{n+1} (n+1+1)} \right|$$

$$\frac{a_{n}}{n+\infty} \left| \frac{a_{n}}{a_{n}} \right| = \frac{a_{n}}{n+\infty} \left| \frac{a_{n+1}}{a_{n+1}} \right|$$

$$x = 1$$
: $\frac{x}{x} = \frac{1}{x}$: $\frac{x}{x} = \frac{1}{x}$:

$$\frac{x=1}{n=0}: \sum_{n=0}^{\infty} \frac{(1-y)^n}{3^n(n+1)} = \sum_{n=0}^{\infty} \frac{1}{n+1} \sum_{n=0}^{\infty} \frac{1}{n} \rightarrow \text{harmonic}$$

L.C.T:
$$\lim_{n\to\infty} \frac{a_n}{b_n} = \lim_{n\to\infty} \frac{1}{n+1} \cdot \frac{1}{1} = 1$$

$$\frac{\chi=7}{\Lambda=0} : \underbrace{\frac{1}{3^{2}(n+1)}}_{\Lambda=0} (7-4)^{n} = \underbrace{\frac{1}{1-1}}_{\Lambda=0} \underbrace{\frac{1}{1-1}}_{\Lambda=1} \rightarrow \underbrace{\frac{1}{1-1}}_{\Lambda=1} \rightarrow$$

Find the Maclaurin series for
$$f(x) = sin(x)$$
. $a=0$ 'Livi taylor Sorii'

$$f(x) = s_1 v(x)$$

$$f(0) = s_1 v_2 v = 0$$

$$v = 0$$

$$v = \frac{1}{1!}$$

$$c_n = \frac{1}{1!}$$

$$c_n = \frac{1}{1!}$$

$$c_n = \frac{1}{1!}$$

$$\begin{cases} f'(s) = (a_1 c_2) & f'(s) = (a_2 c_3) & f'$$

MAT 116 (EN) Sayfa

$$\frac{\zeta_{0} = \frac{k (1-1) (k-1) \cdots (k-(n-1))}{n!}}{(1+x)^{2} + (1+x)(k-1) + x^{2}} = \frac{k(k-1) (k-1) (k-1)}{n!} x^{2} = \frac{k(k-1) (k-1)}{n!} x^{2} = \frac{k(k-1) (k-1) (k-1)}{n!} x^{2} = \frac{k(k-1) (k-1) (k-1)}{n!} x^{2} + \frac{k(k-1) (k-1) (k-1) (k-1)}{n!} x^{2} + \frac{k(k-1) (k-1)}{n!} x^{$$