

M192

Lat # 27

11-29-10

To Prepare for the final exam

- ① Fill in your authorized reference card
- hand written. 1 hour
- ② Re-write all five hour quizzes 5 hours
- ③ Re-view all five PS's and re-write
the problem not on HQ's 3 hour
- ④ Eat & Slap some
- ⑤ For the last hour of prep, study only
what you know

Final Exam is Mon 7:45 Here

card, calc, pencil, eraser

$$\sum_{n=1}^{\infty} \frac{100}{n^{7/8}}$$

Conv or Div

$$= 100 \sum_{n=1}^{\infty} \frac{1}{n^{7/8}}$$

p-series

$$p = 7/8$$

Recall $\sum \frac{1}{n^p}$

$$\sum \frac{1}{n^2}$$

$$p = 2$$

Conv

$$p = 7/8 \leq 1$$

by p-ser

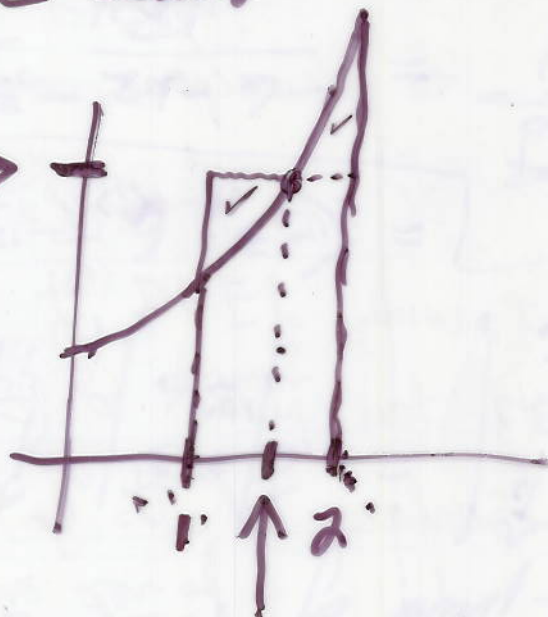
$$p = 7/8 \leq 1$$

div

MVT for sluts

p3

$$\frac{10}{3} = \text{ht in} \rightarrow \text{ave ht}$$



$$y = f(x) = x^2 + 1$$

x val where mv occurs

$$\text{ht} \cdot b = \int_1^2 (x^2 + 1) dx = \left[\frac{x^3}{3} + x \right]_1^2 = \frac{8}{3} - \frac{1}{3} + 2 - 1$$

$$\text{ht} \cdot (2-1)$$

$$\text{ht} \cdot (\quad) = \frac{10}{3}$$

--->

$$\text{ht} = \frac{10/3}{1} = \frac{10}{3}$$

$$C^2 = \frac{7}{3}$$

$$= \frac{7}{3} + 1$$

$$C = \pm \sqrt{\frac{7}{3}}$$

$$= \frac{10}{3}$$

$$C = \sqrt{\frac{7}{3}}$$

Ave ht,
Mean Value

Find C where $f(C) = \frac{10}{3}$ / of f on $[1, 2]$ is $\frac{10}{3}$ and
 $C^2 + 1 = \frac{10}{3}$ occurs at $x = \sqrt{\frac{7}{3}}$

① Repl x by $\begin{cases} x^2 \\ -x \\ x-3 \\ 7(4x-5)^8 \end{cases}$

$\frac{1}{1-x} = \sum x^n$

$\frac{1}{3} \quad \frac{1}{3-(2x)}$

② Add $1+x$ to

③ Mpy the ser $3x^2$

④ Diff

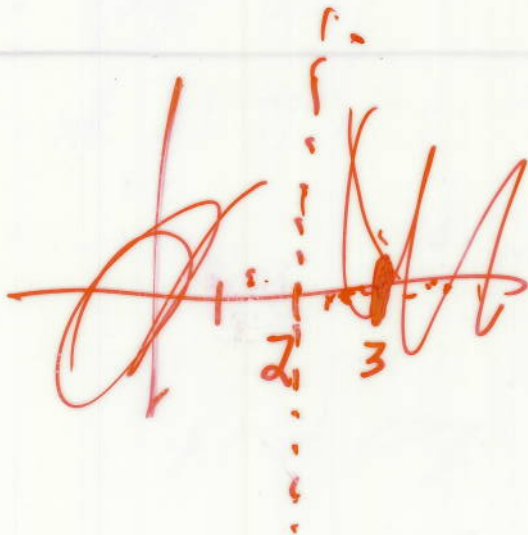
$$\frac{1}{1-x}$$

$$\frac{1}{x-1}$$

⑤ Integrate ser

$$\frac{1}{(x-3)^2}$$

$$\frac{1}{x-2}$$



$$\int \frac{1}{(x-3)^2}$$