MATH 1432, SECTION 12869 FALL 2013

HOMEWORK ASSIGNMENT 6 Due Date: 2/21/14 in Lab

Name:	

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INSTRUCTIONS

1. (Section 8.5, Problem 9)

- . Print out this file and complete the problems. You must do all the problems!
- If the problem is from the text, the section number and problem number are in parantheses.
- · Use a blue or black pen or a pencil (dark)
- · Write your solutions in the spaces provided. You must show work in order receive credit for a problem
- · Remember that your homework must be complete, neatly written and stapled.
- · Submit the completed assignment to your Teaching Assistant in lab on the due date.
- If you do not do all of the problems, then your recitation quiz from the previous Friday will automatically become a ZERO.

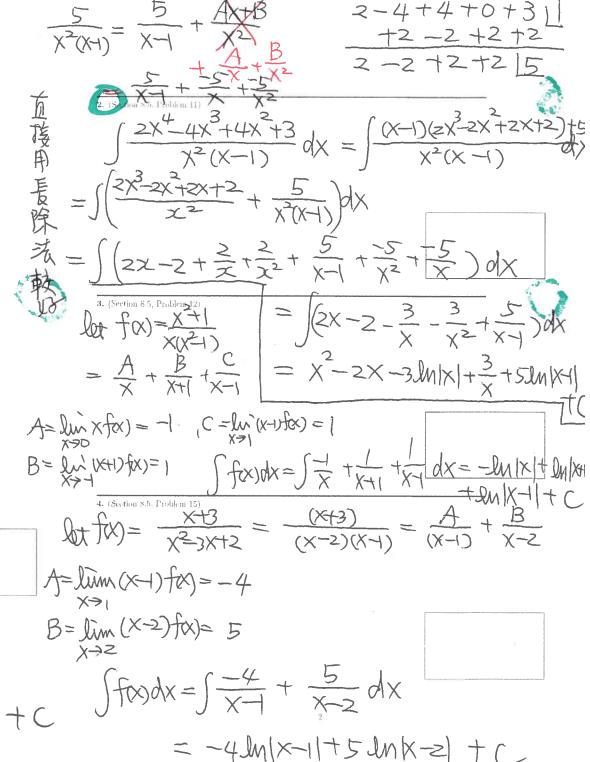
$$f(x) = \frac{7}{(x-2)(x+5)} = \frac{A}{(x-2)} + \frac{B}{(x+5)}$$

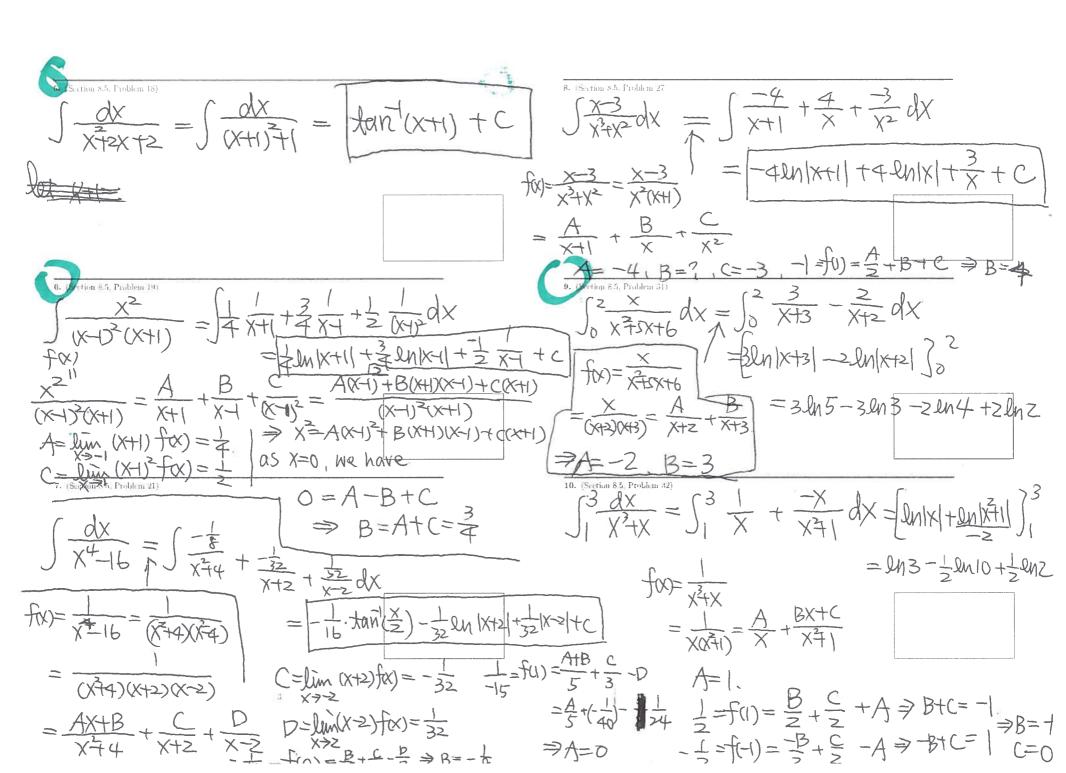
$$A = \lim_{x \to 2} (x-2) f(x) = \lim_{x \to 2} \frac{2}{x+5} = 1$$

$$B = \lim_{x \to 2} (x+5) \frac{7}{(x-2)(x+5)} = \lim_{x \to 2} \frac{2}{x-2} = 1$$

$$\int \frac{7}{(x+5)(x-2)} dx = \int \frac{1}{x-2} - \frac{1}{x+5} dx$$

$$= \lim_{x \to 2} \frac{7}{(x+5)(x-2)} dx = \int \frac{1}{x-2} - \frac{1}{x+5} dx$$





JO SIPTIXXX = SO & + 2 COSZTIX OX = = - 4T SÎPZTIX | V fox)=Sintax M3=1-0[f(t)+f(t)+f(t)] $(2)S_3 = \frac{1}{3}T_3 + \frac{2}{3}M_3$ (d) $I_N = \frac{12}{12} \left[\frac{1}{2} (|+5+|3+|+265)]^{(a)} E_N^T = -\frac{(b-a)^3}{12N^2} f'(c) \right]$ > 27 1/2 CO(0)

 $u^{2} = u^{2} = u^{2} = u^{2} = (u+1)^{2} = (u+1)^{2$ du=cosodo $\int \frac{e^{2t} + 5e^{t} + 6}{e^{2t} + 5e^{t} + 6} dt = \int \frac{du}{u^{2} + 5u + 6} = \int \frac{du}{(u+2)u + 3}$ Det u=et, du=etat = Su+2 + uts du = Inlutz - Inluts + C = 2n|etz|-2n|et+3|+C f(x) 0 1 4 9 16 25 36 49 64 81 100 121 144

(a)
$$|E_{1}| = \frac{(b-a)^{3}}{12n^{2}}|f(c)| ce[1,3]$$
 $f(x) = e^{x} \Rightarrow f(x) = e^{x} |e^{x}| e^{3}$
 $|E_{1}| = \frac{(b-a)^{3}}{12n^{2}}|e^{3}| = e^{x}|e^{3}| =$

 $\sum K = |+2+3+4+11+n = \frac{n(n+1)}{2}$ (Proof: let S=HZ+3+4+111+ N. +) S = h+(1-1)+(h-2)+11+1 25 = (HH)+(HH)+(N+1) $\Rightarrow S = \frac{N(M+1)}{3}$ $\sum_{k=1}^{2} k^{2} = 1 + 2 + 3 + 4 + 11 + 10^{2} = \frac{n(n+1)(2n+1)}{6}$ (USE (KHI)= K33K+3K+1) 16, (b) En= - (b-a) f(4) c) ftx = 15. x= 15 x = (1,4) Ens = | (4-1) 15 < 0,01. => 35 15 COID => h4> 35.100.15 = 7.91 $N \geq 2$ (2=16)