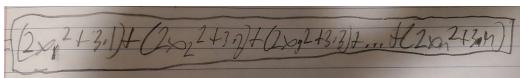
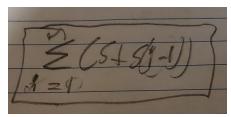
hSTAT 50 HW #6 Calculus Review

1. a) Write out \(\frac{1}{6} \) (2x_1^2 + 3i)
b) Write 5+10+15+20+... in Sigma notation.

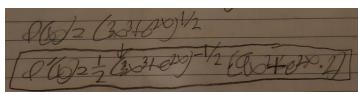
A.



B.

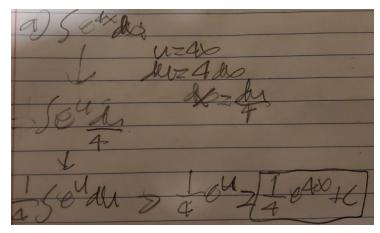


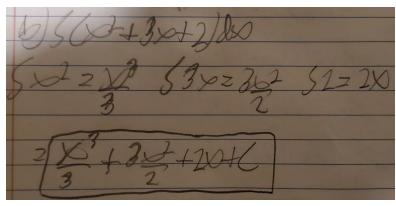
2. Given fix) = \(\frac{3\times + e^{2\times}}{2} \) find f'(\alpha)



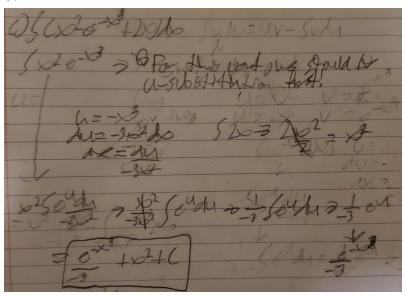
3. Find the following anti-derivatives: a) $\begin{cases} e^{4x} dx \\ b) \\ \begin{cases} (x^2 + 3x + 2) dx \\ c) \\ \begin{cases} (x^2 e^{-x^3} + 2x) dx \\ d \end{cases} \end{cases}$ $\begin{cases} \frac{X}{\sqrt{x^2 + 1}} dx \\ \end{cases}$

A.

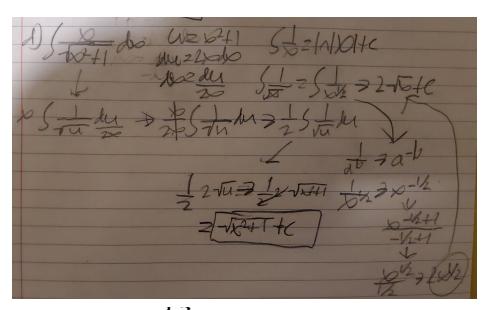




C.



D.



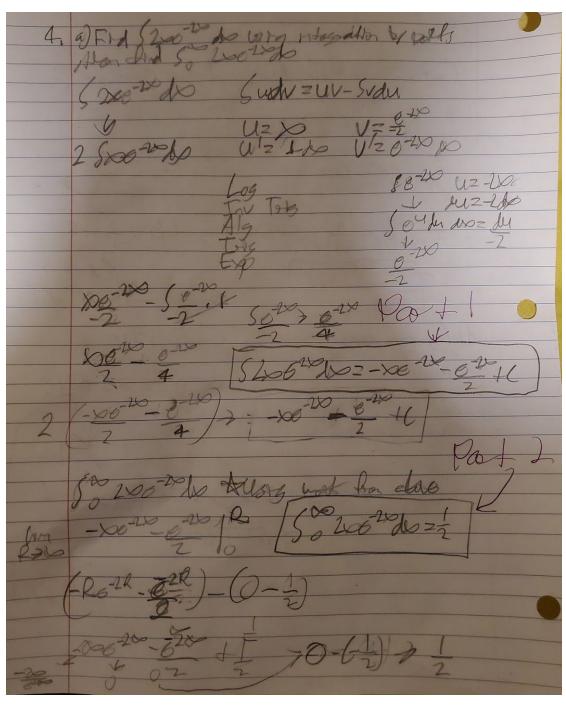
4. a) Find Sexe-exdx using Integration By Parts,

then find Sexe-exdx

b) Find Sexe-exdx

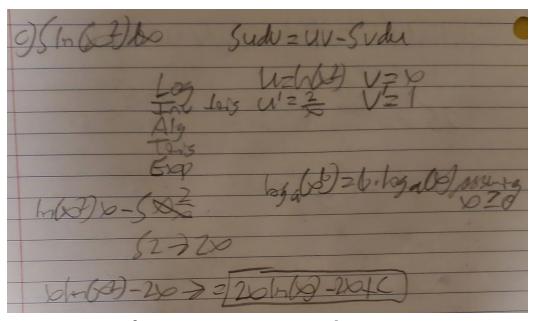
c) Sln(x2)dx

A.



22 10 - 6 2 1 solo (-e 20 3 5-20 20) 56-20 0-20 2(x=10 - (x=10 - (6-24)))

C.



5. a) Find & 15(\$)i

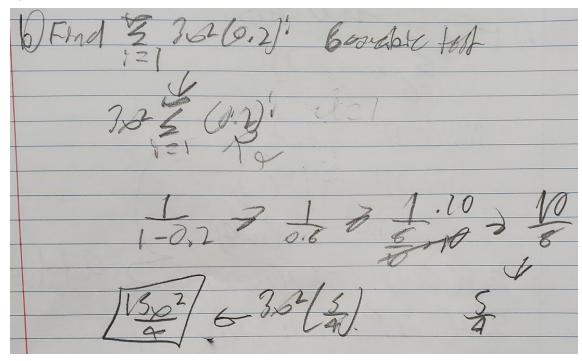
b) Find & 3x2(.2)i

2) Find & 3x2(.2)i

2) Find & 3x2(.2)i

A.

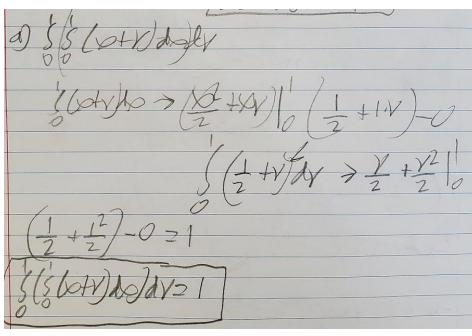
6 15.3



C.

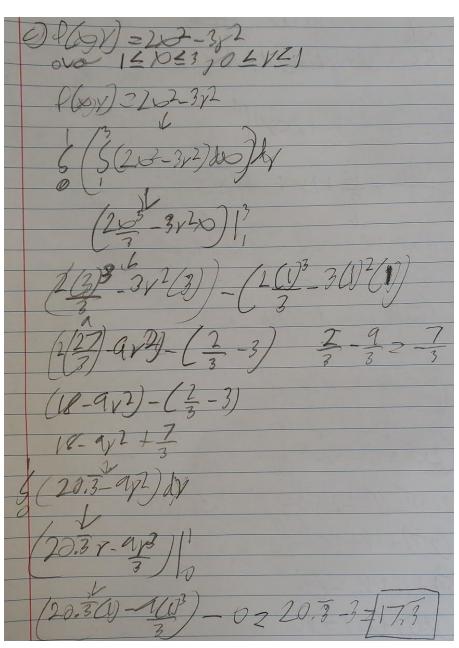
0 Frd 2 30 (0.2) 30260.00 = 302 32(0.2) = 3,2(0.2) 32(0.2) = 7540,00 add Dun 33-(0.2)3 = 3,2(0.008) 33(0,2) = 23(0,00/6) 32002/3 -32(0,0003) 1602 302+0,602+01202+0.02402) Cot 0.0046,21 0.0006d US - 3,74976 D 3.75-3.24470) pt 2[7.00029x2] 0.0002,4

co. Evaluate the following double in tegrals: a) ((x+y) dx dy b) { (x,y+y+2x) dy dx () $f(x,y) = 2x^2 - 3y^2$ over 14x43,04441 d) fix,y) = ex+zy over OEXEZ, 12/52



03/5/08+4+20) dr/do 12 × 2 + 2xxx) 14 (8x2+8+8x)- (2x2+2+4x) (6x2+6x6x -2x2-2-4x 3 (63+6+4x) No (6x3 + 6x0+4x2) 13 (203+60+202) (2003+60)+2003-(2003+60)+2003 12(23)+18+18)-(2+6+2) (54+16+Vb)-(10) (a0)-(10) = 80 (\$ (2/+/+2x)dx)d0=80

C.



D.

0×+21 00 0= 0= 15/52