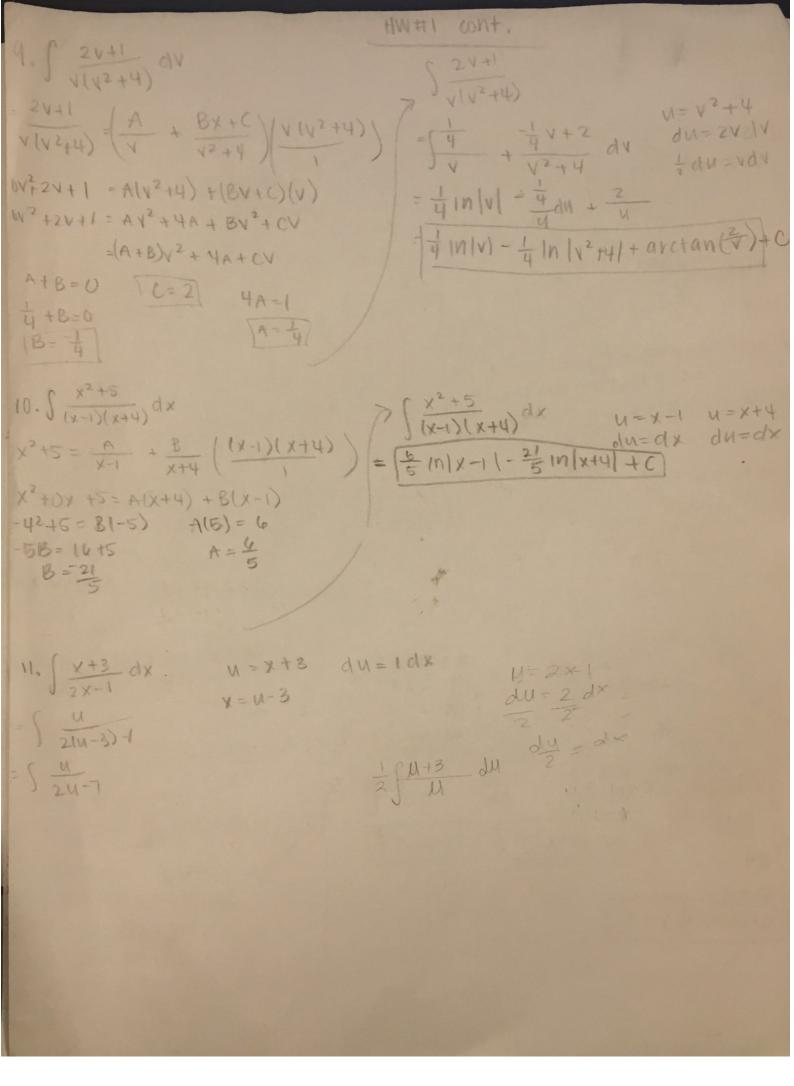


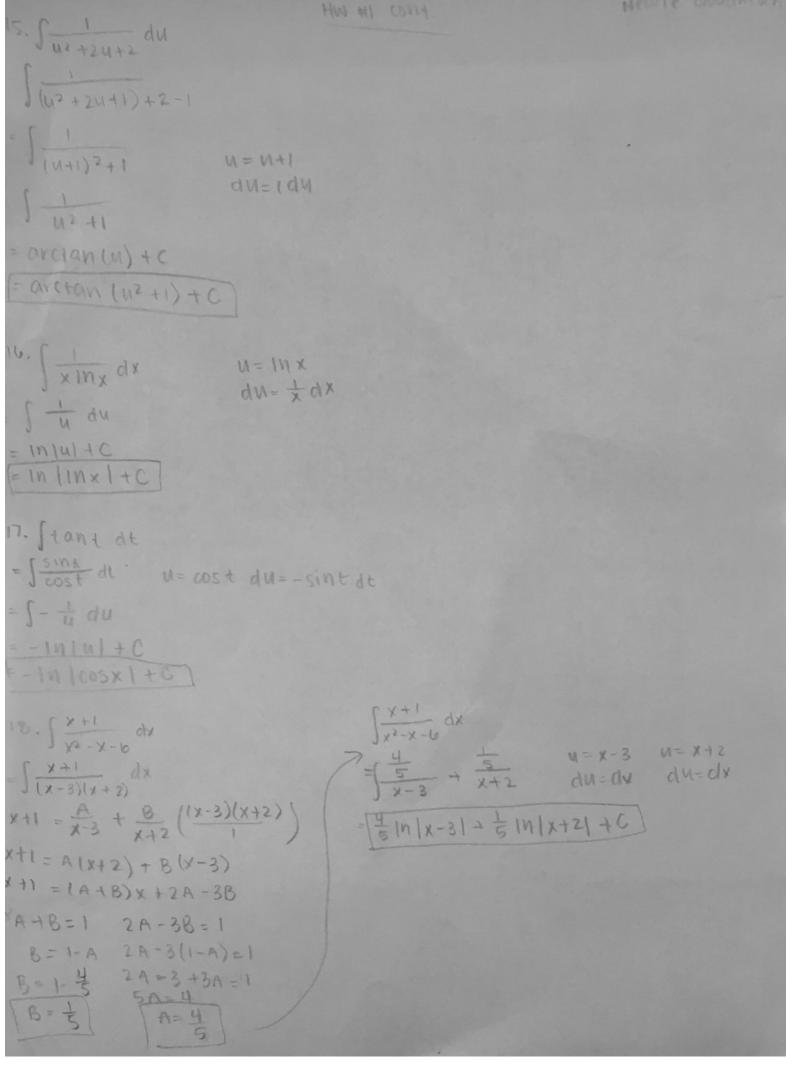
u=x2+1 du=2x dx 10. 1 x2+1 c/x +du=xdx -15 to dx = 1 INIUI + C = 1 IN 1x2+11+C 7=4-2 = 1 2-1 du = 5 u-3 du 1 = [1 - 3 = 4-31n/ul =(Z+2)-31n(Z+2)+C 8. (x+2 dx X+2 = A(X+3) + B(X-1) 14(31n/x-1+1n/x+31)+C X+2 = AX+3A +BX-B x+2 = (A+B)x +3A-B A+B=1 3A-B=2 Ha=3 A=3 B=3(3)-2 B=9+ B=4



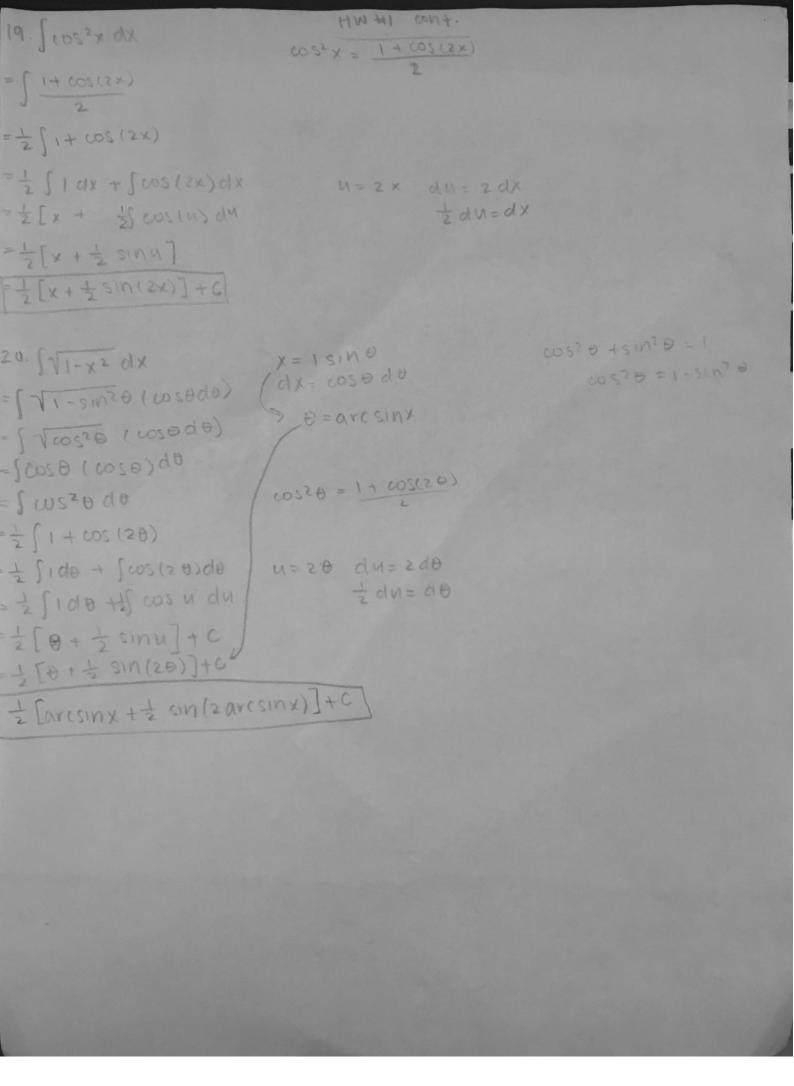
```
12. 5 24+3
y2+34+4 dy U= y2+34+4
du=24+3
       = In |u| +C

F In |y2 +3y +4/+C)
13. \int \frac{3x+2}{x(x+1)^2} dx
13x+2 = \frac{A}{x} + \frac{B}{x+1} + \frac{C}{(x+1)^2} \left(\frac{x(x+1)}{1}\right)
  = CXs + (V+B+C) x + V
0x,+3x+s= +(X+1) + 0x + C(X+1) X
                 C=0 A=2 A+B+C=3
14. 5 1 dy
                                                                                                                                                                                                                                                                                                                                                                                                                                    1= 0 EUISIO =1
                                                                                                                                                                                                                                                                   y = asing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    co250 = 1-21450
- (-17-421N50 (50020)
                                                                                                                                                                                                                                                          ( )= 2 sino de de e arcsin ( )
= \[ \frac{2 \cos \tilde{\theta}}{\tau \tilde{\theta}} \]
= \[ \frac{2 \cos \tilde{\theta}}{\tilde{\theta}} \]
= \[ \frac{2 \cos \tilde{\theta}}{\tilde
( cosp al
= 500
= 0+C

= arcsin(1/2)+C
```



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```
HWHI CONE
[183x sin2x = - 203 cos(2x) + 3[ 2 e3x sin(2x)] - 2 [e3x sin(2x)]
=2 [ 28x sin(2x) = = = 28x cos(2x) + = [ = 28x sin(2x)]
Se3x sin (2x) = - 13 e3x (2005(2x) - 3 sin (2x)+C]
22. Jeysinzydy
- Ssin2 linus du du-Inydy
= 1-105(21nu) du y=1nla)
                                    0 X ( 2 S ( N ( 2 X ) + COS ( 2 X ) - S + C
1- 1 (1-cos (21nu) du
- = fidu - Scos (21nu) du 4=1nu)
= = [u] - [e" = sin 124) - [e" (= sin 20)] du = e4 du
                          u=eu dv=costzu)
-\int_{e}^{u}(-\frac{1}{2}\cos(2u))du) u=e^{u} dv=\sin 2u dv=\sin 2u
= + u - eult sin (201) - = (- = e "cos (2u) - (- = e cos 124)olu)
= = 0" (25111 12W) + cos (2W)
= = = e | (2 sin (2 | n(u) + cos (2 | n (u))))
= = u (2sin(21nu) + cos(21nu))
= = (u- = 1 (2 SN 12 INU ))+ cos(2 IN(u)))
- = 1 (ey - = ey (25)n(24) + cos(24))
= = 1ey - = ey (2sin(2y)+cos(2y)))+C)
```