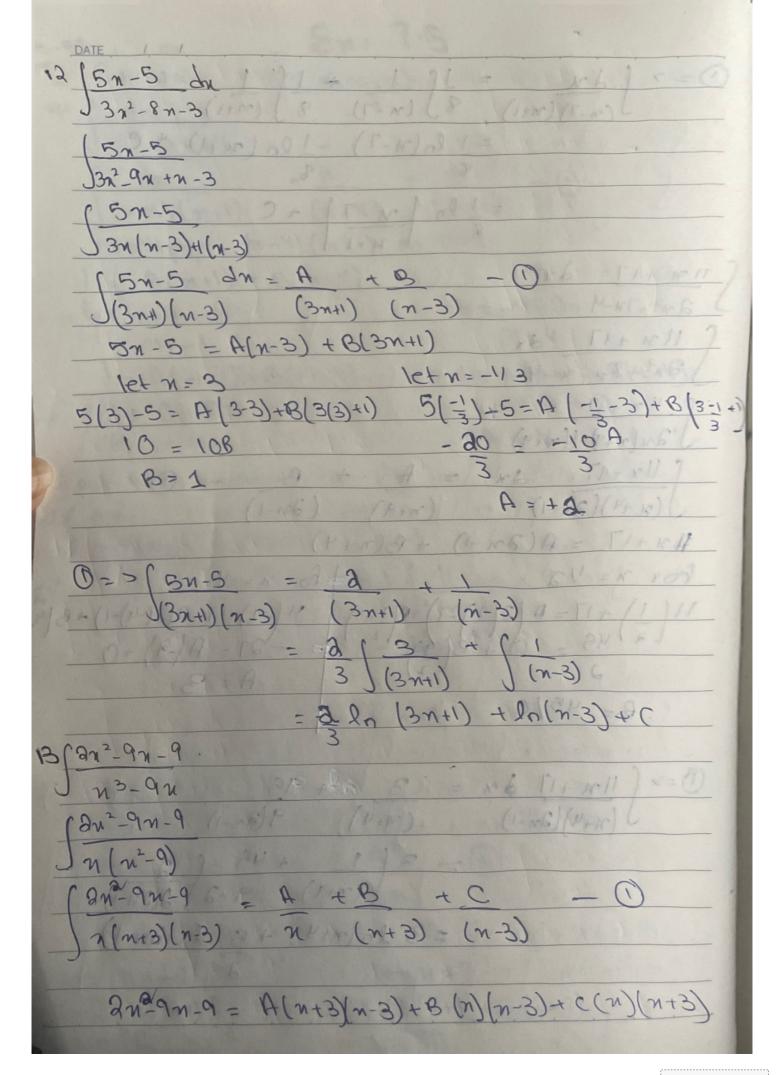


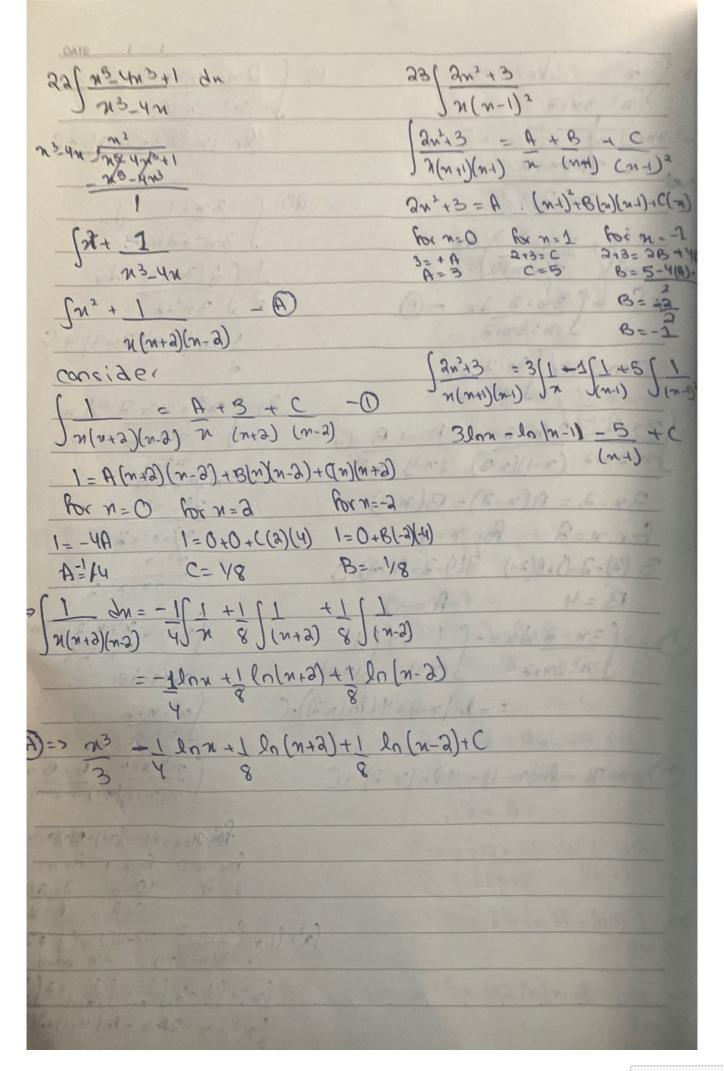
5=7 $\int dn = \frac{1}{8} (n-7) = \frac{1}{8} (n+1)$ = 1 ln(n-1) -1 ln(n+1) + C $=\frac{1}{8}\ln\left|\frac{x-7}{x+1}\right|+C$ $\int \frac{11}{2} x^2 + 7x - 4$ 11n+17 dr (12) Jan(n+4)-1(n+4) [11x+17 dx = A + B - 0 (n+4) (2n-1) A (n+4) (2n-1) #n+17 = A(2n-1) + B(n+4) 1 6 for n= -4 118 1 = 0 for x= 12 $\frac{11(1)+17=A(3(1)-1)+B(1+4)}{2} = 0+B(2) + 0$ $\frac{11(1)+17=A(3(-4)-1)+B(4)}{2} = 0+B(2) + 0$ A = 3B= 45/9. $0=7 \left(\frac{11}{n+1} \frac{17}{2n-1} \frac{1}{2n} = \frac{3}{2n+1} + \frac{45}{9(2n-1)} \right)$ = 3 1 + 4B (2) (3N-1) (2 - 3 ln (n+4) + 5 ln (an-1)

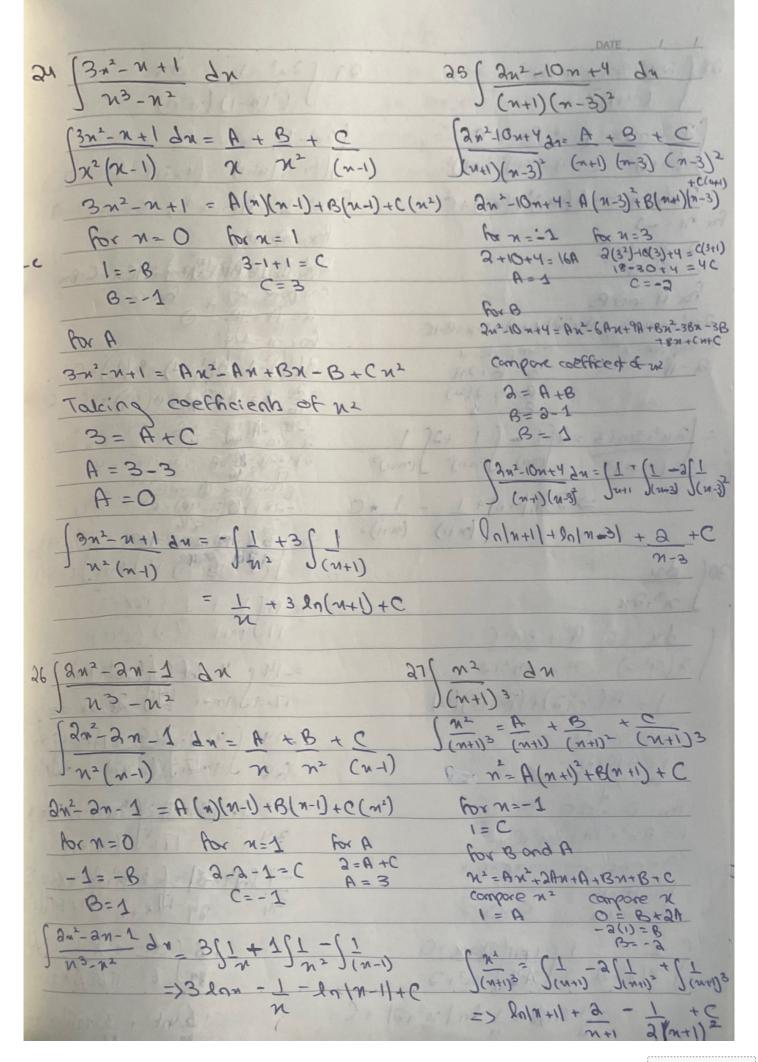


m N=-3 For N=0 2(-3)-9(-3)-9=0+8(-3)(-3-3)+6 2(0)-9(0)-9=A(0+3)(0-3)+0+0 30 = 18B -9 = -9A B= 2 A=1 800 N = 3 2(32) -9(3)-9=0+0+((3)(3+3) -18 = 18C C=-1 all valves in (1) [2n2-9x-9 = [1 +2[1 - [1 Jn(n+3)(n-3)] Jn](n+3)](n-3) = lon + 2ln/n+3) - ln(n-3) +C = lo | n (n+3) 1 + C 14 (dx Jn(n-1)(n+1) 2 2+1 2-1 1 = A(n+1)(n-1) + B(n)(n-1) + C(n)(n+1) For N=0 For N=1 For N=-1 1-A(0+1)(0-1)+0+0 1-0+0+C()(1+1) 1-0+B(-1X-1-1)+0 1=28 1=-A 1=2C B= 12 Q=-1 1 C=1/2 D=> [dx = - [] + 2 [(n+1) + 2 [(n+1) -lon +1 20(m+1) +1 20(m-1)+0 =1[-2lnx + Pn(x+1) + 2n(2-1)] + C = 7 80 (N+1) (N-1) + C => 1 80 (N-1)

long division => 0+R (n-1) da M-3 + 1 dx Sn+1+ (2) Ju-3+ 1 1 [n-3[1+]n+3 => 22-3x +ln/n+3/+C 1322-10 da Ru n=2. 12(3)-23 = 0 +B 1 B=2 for A 3+12n-22 1 12n-22 = An-2A +B compare coefficient ofx 13 + 1 (2n-22) 12 = A $3n + \sqrt{2n-ab}$ $(n-a)^2$ 0=> (12 n-32 = 12 (1 + 2 (1 consider [$[2n-2]^2 = A + B = 0$ 3n+12ln(n-2)+2l-1) = + l $(n-2)^2$ $(n-2)^2$ $(n-2)^2$ 12 n-22 = A(n-2) +B 3n+1220/n-2)-12

2n-3 du In In 2- 3n+10/+C 11+3n-2 dn $\frac{1}{2} \int \frac{2(3n+1)}{3n^2+3n^{-1}} dn$ 11+(3x-2 dx -A) Consider (3n-2 dn 3n-2=13n-2=1+B-0 n23n+2 (n-1)(n-2) (n-1) (n-2) 3n-3=A(n-3)+B(n-1) 3n-3=A(n-3)+B(n-1) $-\frac{1}{2}$ $-\frac{1}{2}$ $-\frac{1}{2}$ $-\frac{1}{2}$ $+\frac{1}{2}$ $+\frac{1}{2}$ 3 (a)-2-0+B(2+) 3(1)-2=A(1-2)+0 B=4 A=-1 = -lo(n-1)+4(lo(n-2))+C) N(N+1)(N+) N (NH) (N+) (A)=> N -ln/n-1) + 42n/n-2/+C N + 2 + 2 = A(N+1)(N+) + B(N)(N+)+C(N) for N=0 for n=1 for n=-1 -2=A 40=2c 2=3B C=2 B=1 [n2+[1-2[1+](n+1)+2[1+1) 1 n3+n-2lnn+ln(n+1)+2(hlas





 $\frac{29 \left(2n^2-1\right) \left(2n^2+1\right)}{\left(4n-1\right) \left(n^2+1\right)}$ 28 (3n3+3x+3 du an2-1 du = A + Bn+ (n+1)3 (n+1) (n+1)2 (n+1)3 2n +3n+3 = A(M+1)+B(M+1)+C 2n2-1 = A(n2+1)+Bn+C(4n Por 21 = - 1 for Acidy 2-3+3=C 2(4)2-1= A((4)+1)+0 C=2 For A and B 2n2+3n+3= Ax2+Ax+ A+Bn+B+C Combare x combare x for B and C. 3=B+2A B=3-2(2) 2x2-1= Ax2+ A+18x2-Bx+4Cx : \\ \frac{(\text{\tint{\text{\tint{\text{\tint{\tint{\text{\tint{\text{\text{\text{\text{\text{\text{\tint{\text{\text{\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tint{\tint{\tint{\tint{\tint{\tint{\text{\tint{\text{\text{\tin}\tint{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tin}\tint{\text{\text{\text{\texitex{\ti}\tint{\text{\text{\tint{\text{\texi}\tint{\text{\text{\text{\ti}\tint{\text{\tint{\texit{\texit{\texi}\tint{\text{\tint{\text{\ => 2 Do | n+1)+1 - 1+C $\frac{2}{17}\int_{4\pi/1}^{4\pi/1}\frac{1}{17}\int_{2x+3}^{12x+3}$ =-14 1 4 6 (Qn+12) 1 = A(n2+2)+(BN+C)(u) Bx n=0 G8 Jynt 17 Jnz 17 2 Jnz 1= H(0+3) -7 lo |4n-1/+6 la | n21/+3 to for B and C 1 = An2+2A+Bn2+Cx Compare nº compare n 1 = A+B 0 = C B = -1/2 C=0 -7 laf4mar) +6 lafniti +3 taix $\frac{1}{n(n^2+2)} = \frac{1}{2} \frac{1}{n(n^2+2)} \frac{1}{n(n^$ == 2 lone + 1 lo | n2+21 + C