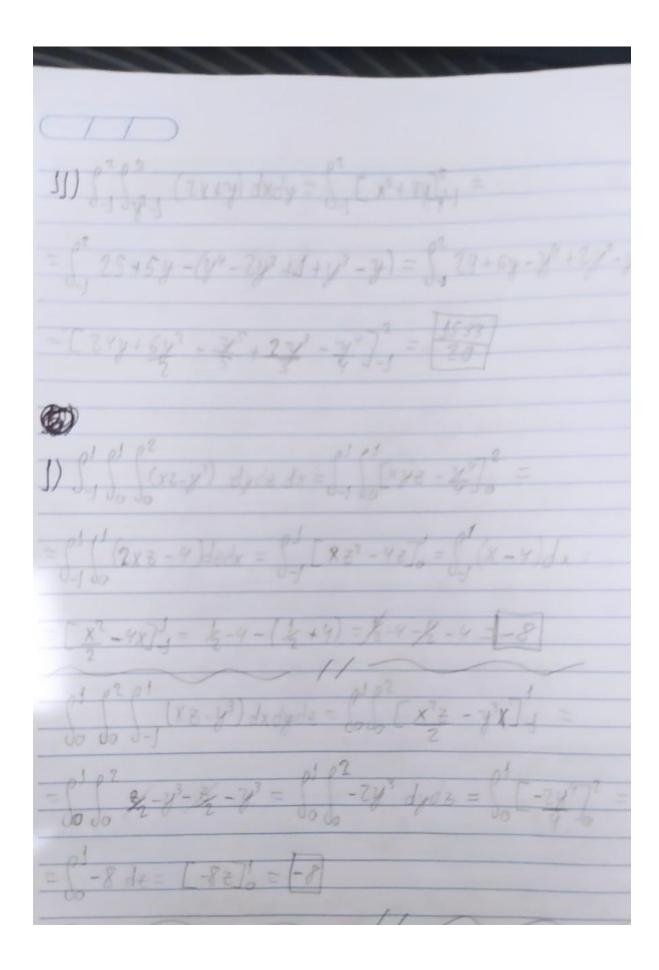


b) S J (xig) dy dx = S [ les (xy); dx = (2) Dn(x27) - In(x41) d ((X+2) In(X+2) - (X+2) - (X+1) In (X+1) - (X+1) / = = 4ln4-4-3ln3+3-3ln3+3+2ln2-2= = 1/29-6/2+2/2= 1/22 -6/2+2/2 2X3 + 5X3  $\begin{bmatrix} x^2y + y_3 \\ 3 \end{bmatrix} = dx =$ T 216 0-2 1-4x - 8x2+ x3+ 2 = 24x - 2x2 - 8x3 + xy + x 0-2 7.8 +4 + 32 - (24 (-2) - 2.4 - 8.1-8) 896 tilibra 15

7) S (VA) 30 (VA) dy & = ( -M(cos (ym)) dy = (2 -coxxx = C-Senxxx /2 = 1/47/2 8) So So Genx Semy dy de = St - Senx cocy In =  $= \int_{-\infty}^{\infty} \operatorname{Seny} = \left[ -\cos x \right]^{\frac{1}{2}} = \left[ \int_{-\infty}^{\infty} \operatorname{Seny} \left( -\cos x \right)^{\frac{1}{2}} \right]$ 9) (2) y lnx dydx = (2) (2x y2) dx  $= \int_{1}^{2} \ln x \, dx =$  $= \frac{1}{2} \left\{ u du = \frac{1}{2} - \frac{1}{2} \frac{1}{2} x = \left[ \frac{1}{2} \frac{1}{2} \right]^{2} \right\}$  $= \ln^2(1) - \ln^2(1) - \ln^2(2)$ 10) So Jo (x2+y2) dydx = Sy [ xy+26] = So No. x2+X7 = 1 xth + xth = [2xth + 2xth] = 4288 105 tilibra



8-1 00 00 (XZ-Y3) dzdydx = 0+00 [XZ2-Y3Z] = 0-100 (2 - 23) dydx = 0-1 [24-4] ]= 2a) (6xt) dydxdz = 100 6xye 6 =  $= \int_0^1 \int_0^6 (6x^2 + 46x + 6x + 6x^2) dx dx = \int_0^1 \left[ \frac{6x^3}{3} + \frac{6x^2 + 27}{7} \right]_0^6 =$  $= \frac{1}{10} \frac{1684}{3} + \frac{689}{2} \frac{1}{10} = \frac{689}{15} + \frac{689}{10} = \frac{6}{15} + \frac{6}{10}$ P\$ P3 [Z.e] = P (Z.e) - Z) drdz =

