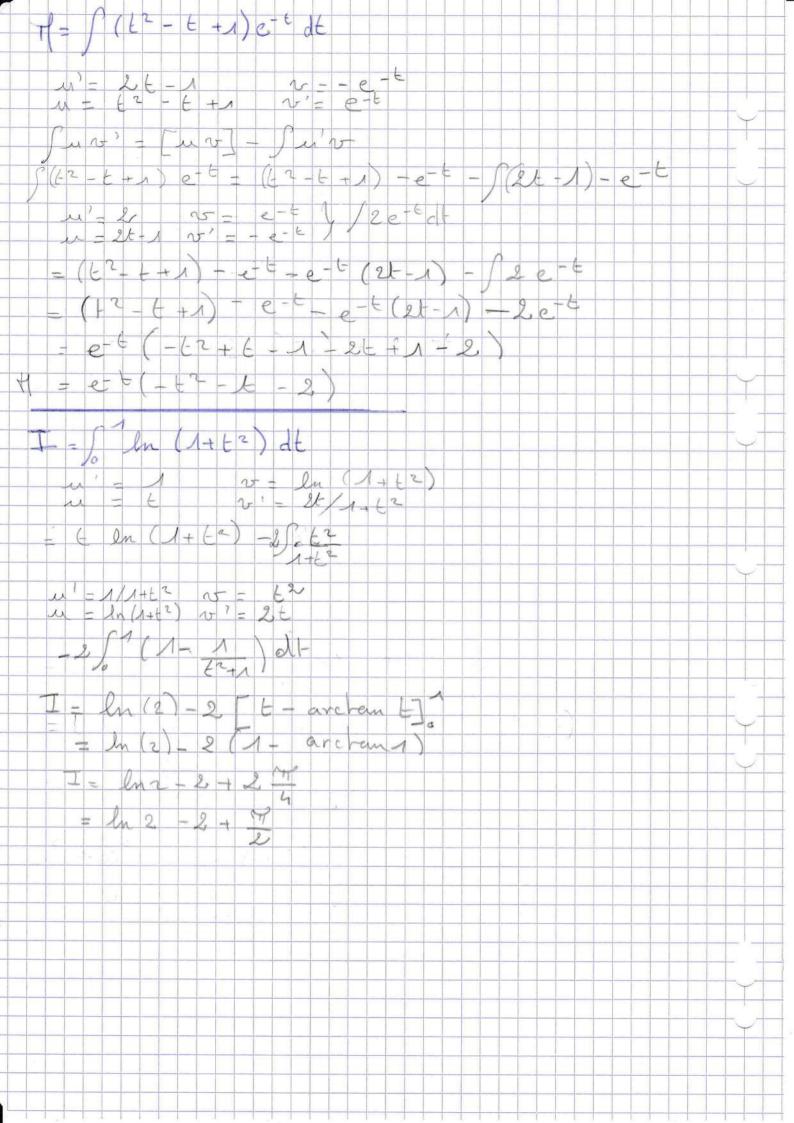
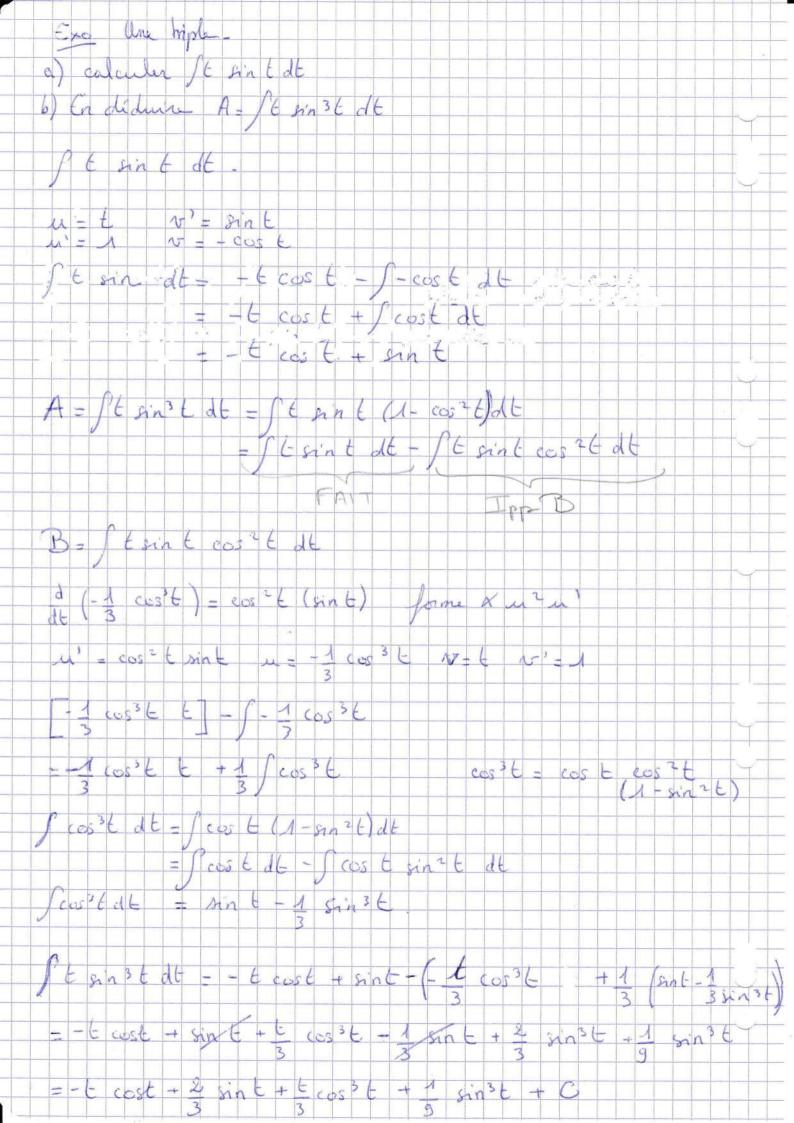


Integrations / Houties with the start " v = [uv] - [uv' Ede In e - enti In 6 e man (en+1-1) - (n+1)en+1+1 (n+1) (n+1)2 1 de X A Referir Garrole m'rdt- (mr) 15 - acta 62-11 Earchons - I ln (1+ET) 6=1 (1-1) sin t de Jou'dt = [un] + Sv'u 1-cost (+-1)1-1-cost $u = \sin t \qquad \forall - (t - 1)$ $u = -\cos t \qquad \forall - 1$ = - cost (+ 1) + s cas & dE = (1 - E) cost + s cos & dt = (1 - E) cost + sin &



Intégrale a) Trouver la junitire de che = e + e b) alare per parties (1+1) cht at a) 1 (ex+e-x) dse = 1 (ex-e-x) = shx che do - shoe (1+1) oht dt u=(+1) v'= ch & - chro u'=(1) v = sht = shx (++1) cht dt = [(++1) 1 e2-e-2 - /2 - /2 2-e-2 (+1) 1 ex-ex-cht = (++1) sht - Sht dt. u'=1 v- sin (ln E) - u - E v'= cos (ln E) N=It sin (ln E)] = I t cos (ln E) dt = - Pcos (lnt) dt 11'=1 v=008 (ln E) n= t v-'= + sin (ln E) Tt cos (lnt) Jet - Sin (lnt) It cos (ln E) + Fin (ln E) La cos (lnt) = [t cos (lnt)] + Rn (lnt dt N=-[t (0s (lnt)]+N () N=-1 [t (0s (ln f)] = 1 N=-1 (-e7-1)= 27-1



Intégration / Partie n EM, In = f Winn x dx s) fontrons pour n & que In = n -1 In-2 On fera un integration par parties \$ (g(2)) = \$ (g(2)) . g'(2) A (sin x) m-1 In = Sin 2 sin 2e de u'= sin ze; v= sin n-1 x u= -cos x v= n-1 sin n-2 (cos x) $In = [-\cos x \sin^{2} x] - (-\cos x)(n-x)(\sin^{2} x)(\cos x) dx$ In = (n-1) 1 2 sin n-2 2 cas 2 de On sait (higo hyperbolique) cos2 x = 1-sin2 x $I_{m} = (n-1) \int_{-\infty}^{\infty} \sin^{n-1} x \left(1 - \sin^{\frac{1}{2}} x\right) dx = n-1$ = (n-1) (sin = 2 cox -) = sin 2 dre In (1+n-1) = (n-1) In-2 In = n - 1 In - 2 It Vendredi Joulnes que Vp EN Tep = (2p)! (4)