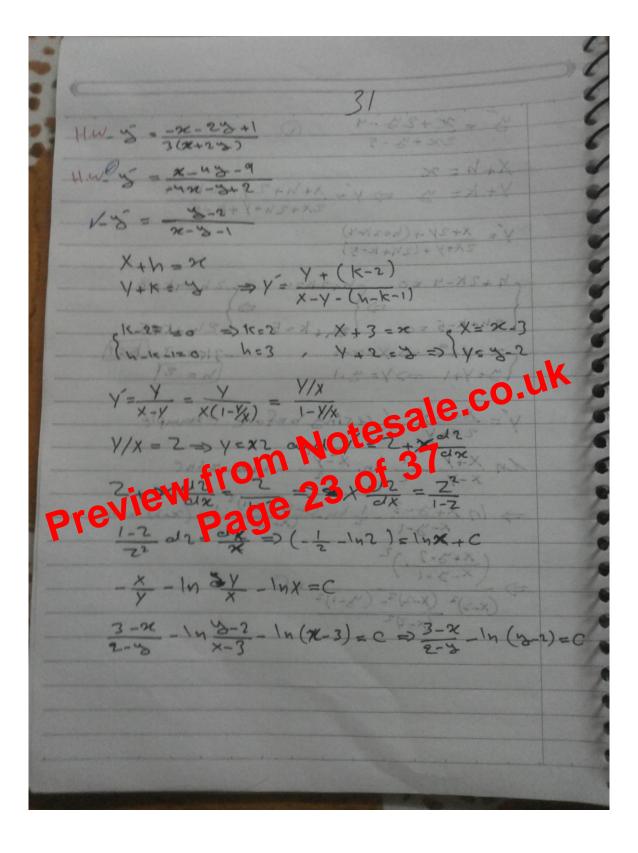
@ (45ecx+4 (cot(secx)) dx+(31n(x)- (3cos)) d8=0 My = 2 Sec y ton's (1+cot2 (sec 31) Cot (sec 3) Nx=3/20 My + Nx => Not exact Mdx+Ndy=0 =0 My=Nx (Enact) => 3(8) = N - 2 (5 mdx) =>9(8)= S(N-3= [Smd1] 25 ... @ (), (3) \$ (x, 8) = C.

M=e M3-Nn 5 2 dn 5-2 /n/1-x/ M= (1-N)2 => (1-N)2 dx + (1-x) dy =0 1 + y = 1 - x => + (x1x) - 1 = x + 3(x) $\Rightarrow \begin{cases} f_{\mathcal{H}} = \frac{3}{(1-2)^2} + \frac{3}{3}(x) \\ f_{\mathcal{H}} = \frac{3}{(1-2)^2} \end{cases}$ => = C



22222222 38 How to salve lagrange equation ? For Solve Lagrange equation, we act 19ke chloroethi equations, we take derivative With x of the equation (3-xp(x)++(x) than J=P(x)+xy p(x)+y x (x)=p(x)+y (x)+y (x)+x(x) Now we transform f(x) to another Side + 5-9(8)=8(x+(8)+4(8)) (1) 99 y + (x)=0 then y==0 or 20 p(x)++(x) Preview from Notesale.co.u.

Preview page 30 of 37 P-P(P)=dP x P(P) + dp + (P)=dp (xpip)+/p => dp + -1 = 2 + 2 (8) + 2 (8) + 2 (8) + 2 (8) Is a Break Education and the genera Salython is XET (P.C) there fore

- 1 [] 2(170) 11+x dx+c]=1+c/51+x 7= 1 dy=) (1+ c/J+x) dx = (x+25+x) Hw Find the orthogonal trajectory of the Pamily at Curves * Solve the Rollowing differential equations (1) 5 = xe3-x2 Preview 22 of 37 Page 32 of 37 folution 40- 3-25-4 (8)3 J= J+267 - 125 (x)2 g y=e, →y=ex-u(e)³ |y'=|x x x x -4 (√2)³ 25 -4 (√2)³