EXAMPLE 2:
(i) Ssin (x+9)dx

present du = 1 · dx = dx

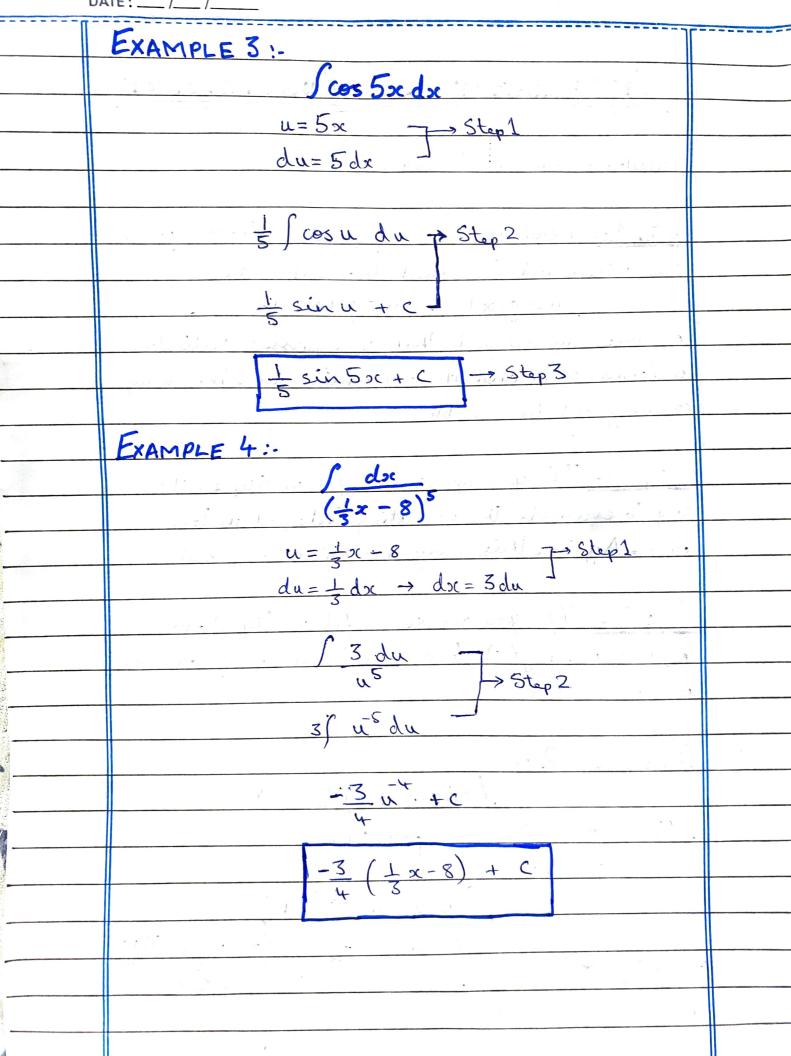
| Sinu du T> Step2

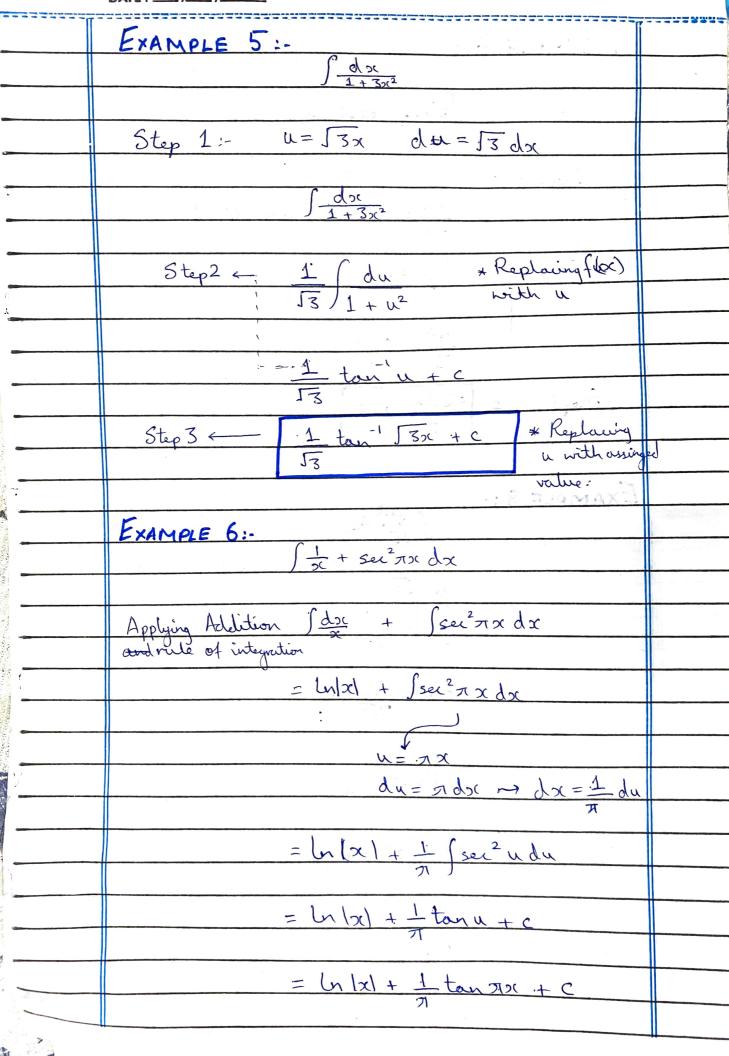
- cos u + c reptainy - cos (x+9)+c

(ii) (x-8)²³dx . Star³

u = x - 8 Step 1 $du = 1 \cdot dx = dx$

 $\frac{1 \cdot dx = dx}{\int u^{23} du = \frac{u^{24} + C}{24} = \frac{(3c - 8)^{24} + C}{24}}$





EXAMPLE 7: Sin²x cosx dx Step1 er $u = \sin x$ $\frac{du}{dx} = \cos x \rightarrow du = \cos dx$ Step 2 = Ju²du $L = \frac{u^3}{7} + C$ Step 3 --> = sin 3 oc + c EXAMPLE 8:-Jesse dx ルニ」かく $\frac{du}{dx} = \frac{1}{2Jx}$ $\frac{du = 1}{2\sqrt{2}} \frac{dx}{dx}$ Se du 2. Seu da 20 + C 2ex+c

DATE:/	
 EXAMPLE 7:	
Jsin²x cosx dx	
Stepl = u = sinx	
$\frac{du}{dx} = \cos x \rightarrow du = \cos dx$	
dx	
Step 2 = Su ² du	
$L = \frac{u^3}{3} + c$	
$St_{ep3-} = sin^3 sc + c$	
3	
EXAMPLE 8:-	
 Je die de la constant	
u = 150	
$\frac{du}{dx} = \frac{1}{2\sqrt{2}}$	
dx 21x	
$du = \frac{1}{2\sqrt{3}} dx$	
2/20	
$\int 2e^{u} du$	
 2. Seu da	
5 W.	
2e ^{5x} + C	
	11