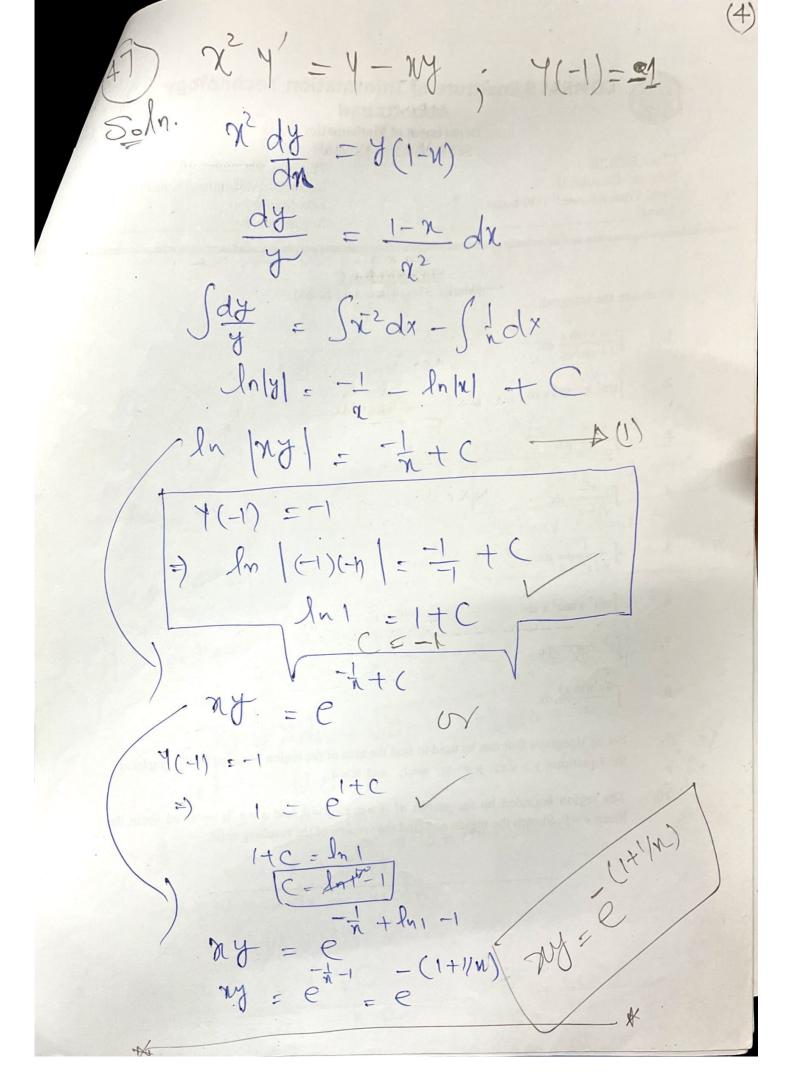
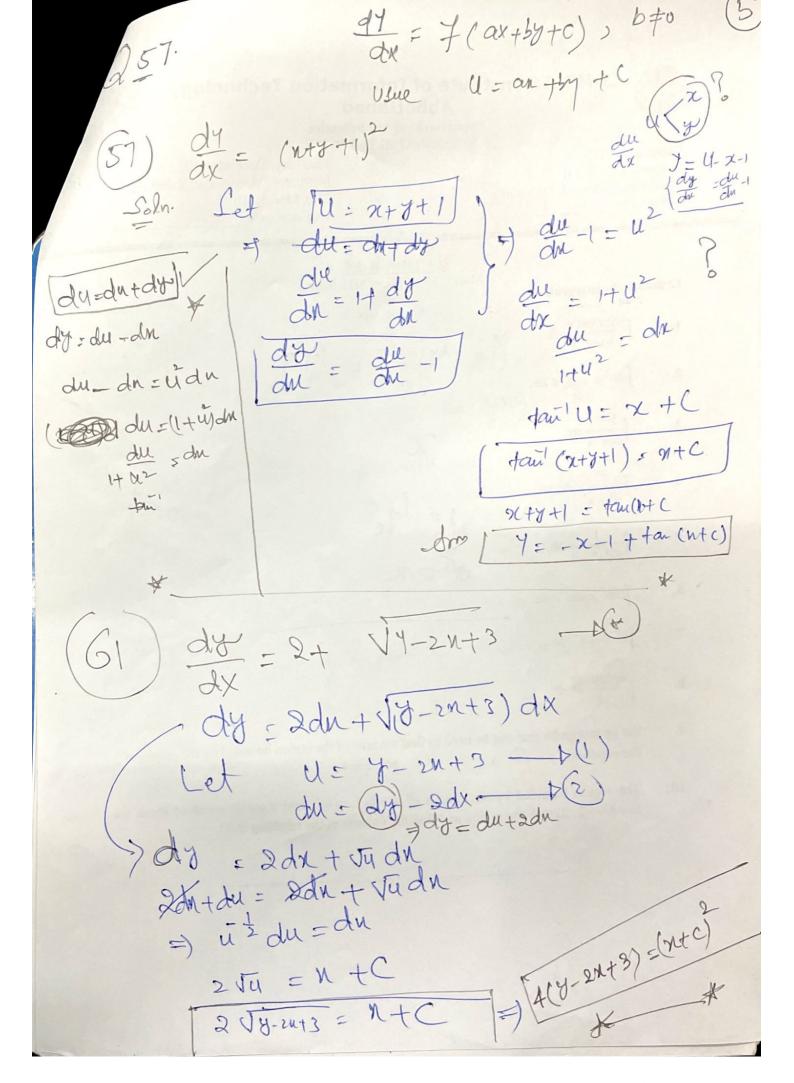
Defn. A D.E of the form is said to be separable, or to have separable variables. Note: Separable Sen- Can be written as My) dy = Sem du Aug = dh etc. Methol of Suln: 1) Separate variables. 2) Outegrate the Sam.

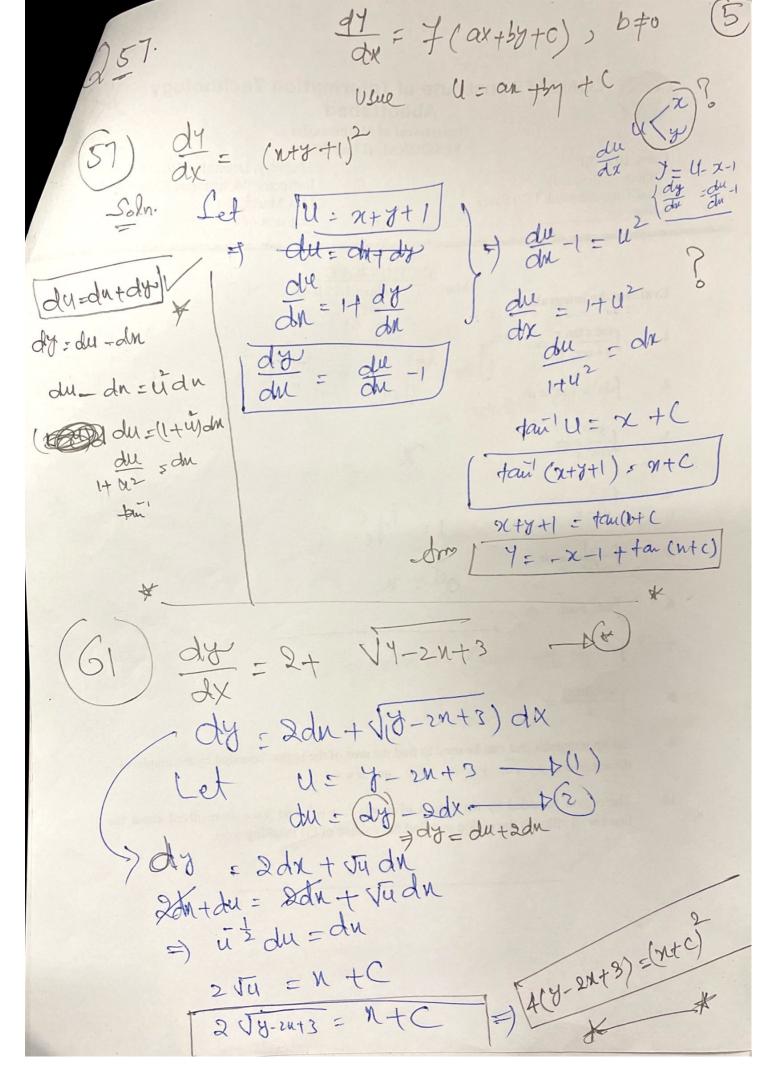
2.2 Exercises: l. 0 dy = 3in 5x dy = sinsu du John = loinson da YE - CUSH + C QC2. dx = 1+242 dy = 73inx Sin x dn = 1+242 dy = ) J Sinnaln = Sty dy + Szyrt dy - cosn = In/y/ + 2 42 + C Inly + 42 + Cm = C# et sin 2nd x (con) (ery - 7) dx= e sinzuan + con(ex-y) dr=0 81112N dx + ey- y dy =0 28inn dn + (e' - ye') dy =0 (abinxdx + Je'dy - Je'dy =0

dt = dr y2 = 2x +1 J2 dy = en dn 1+en Jy dy = | en dx  $\frac{\vec{y}}{-1} = \int \frac{e^{x}}{1+(e^{x})^{2}} dx$  $-\frac{1}{7} = \int \frac{1}{1+u^2} du$   $-\frac{1$ - 4 = 600000 tani(ex)+C - = tan (ex) + C





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