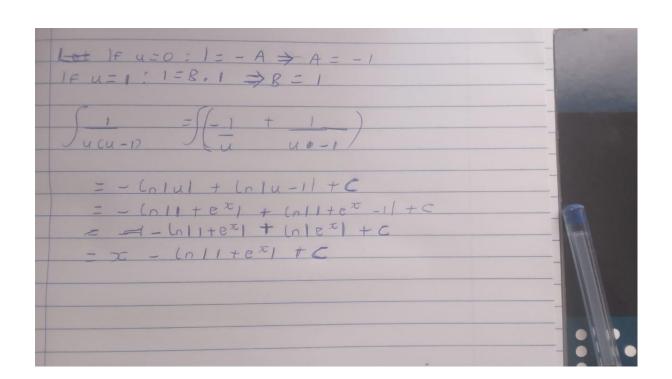
Integral Group

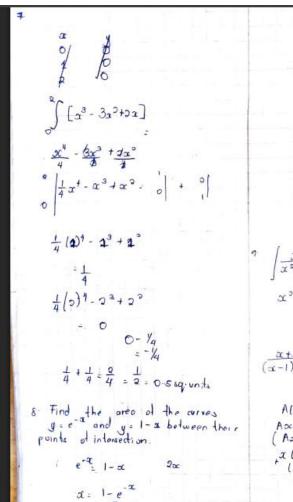
Integral Grou

 $2) \int \frac{x^2}{(x^3+1)^2} dx$ $\int \frac{du}{u^2} = \sqrt{3} \int \frac{u^{-2+1}}{u^2} = \sqrt{3} \int \frac{u^{-1}}{u^2}$ If u= 1+ex then ex=u-1 1 = A + B 1 = A (u-1) + Bu



 $\int x^2 e^{x} dx$ Division by parts $u - x^2$, $dv = e^{x} dx \implies du = 2x dx$, $v - e^{x}$ $= x^2 e^{x}$ $= \int 2x e^{x} dx$ Division by parts t for $\int 2x e^{x} dx$ $= 2(x e^{x} - \int e^{x} dx) = 2(x e^{x} - e^{x})$ $= x^2 e^{x} - (2x e^{x} - 2e^{x})$ $= e^{x}(x^2 - 2x + 2) + C$

6 Sex cos x dx
u= cocx dx-exdx
Lex cos x + (Sex sin x dx) - Let this be I
Let this be i
Integrate J
$u = \sin x$, $dv = e^{x} dx$
$= e^{x} \sin x - \int e^{x} \cos x dx = e^{x} \sin x - 1$
Substitute J
$I = e^{\pi} \cos x + (e^{\pi} \sin x - I) \Rightarrow 2I = e^{\pi} (\sin x + \cos x)$
T = 0.20 (5)
$I = e^{x} \left(\sin x + \cos x \right) + C$
= e (Sin x + cos x) +C
- C (SIP L + COS L) + C
2



oc + e - = 1

$$\frac{x+5}{x^2+2x-3}$$

$$x^2+7x-3$$

$$x^2+7x-3$$

$$x^2+3x-3$$

$$x^2+3x-3$$

$$x^2+3x-3$$

$$(x-1)(x+3)-1(x+3)$$

$$(x-1)(x+3)$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x+3)-1(x+3)}$$

$$\frac{x+5}{(x-1)(x+3)}$$

$$\frac{x+5}{(x+5)}$$

$$\frac{x+$$

$$\frac{1}{x^{2}+3x+2}$$

$$\frac{1}{x^{3}+2x^{2}}$$

$$\frac{1}{x^{2}+3x+2} = (x^{2}+2x+x+2)$$

$$\frac{1}{x^{2}+3x+2} = (x^{2}+2x+2)$$

$$\frac{1}{x^{2}+3x+2} = (x^{2}+3x+2)$$

$$\frac{1}{x^{2}+3x+2}$$

Group	members	- 216480 - 220957 - 220546	
Mark	Nyanjui	- 216480	
Njeri	Masila	- 220957	
Nazlin	Jemeli	- 220546	