

NOTE CHECK → 4.5

Ex 1:  $\int_1^5 x \, dx$

Ex 2:  $\int_0^{\pi/2} \cos(x) \, dx$

Ex 3:  $\int_4^9 x^2 \sqrt{x} \, dx$

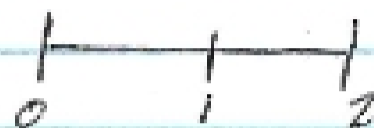
Ex 4:  $\int_0^{\pi/3} \sec^2 x \, dx$

Ex 7:  $\int_0^6 f(x) \, dx$ ,  $f(x) = \begin{cases} x^3, & x < 2 \\ 5x-1, & x \geq 2 \end{cases}$

TOTAL AREA =  $\int_a^b \quad dx$ , = { ;

Ex 8: FIND AREA BETWEEN  $f(x) = 1 - x^2$  & X-AXIS  
ON  $[0, 2]$

$$A = \int \quad dx$$



Ex 10:  $\int_0^2 4x(x^2-1)^3 dx$  (METHOD 1)  
 $u =$

$$\text{Ex 11: } \int_0^2 4x (x^2 - 1)^3 dx$$

(METHOD 2)

$$u =$$

$$, \quad x =$$

$$x =$$

$$\text{Ex 12: } \int_0^{\pi/8} \sin^5(2x) \cos(2x) dx$$