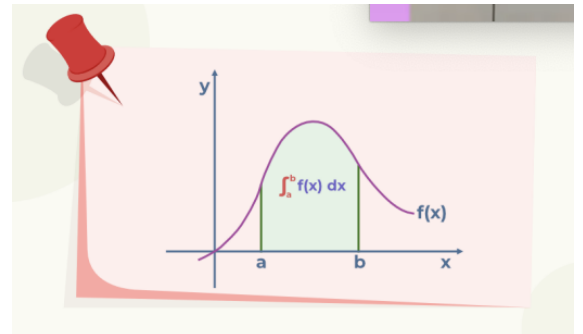


Definite Integrals

Wednesday, 23 July 2025 7:19 PM

Area of bound by $f(x)$

$$A(a, b) = \int_a^b f(x, y) dx$$



$$\begin{aligned} \text{Ex} \rightarrow I &= \int_4^6 3x^2 dx \\ &= 3 \int_4^6 x^2 dx \\ &= 3 \left[\frac{x^3}{3} \right]_4^6 \\ &= [6]^3 - [4]^3 \\ &= 216 - 64 \\ &= 152 \end{aligned}$$