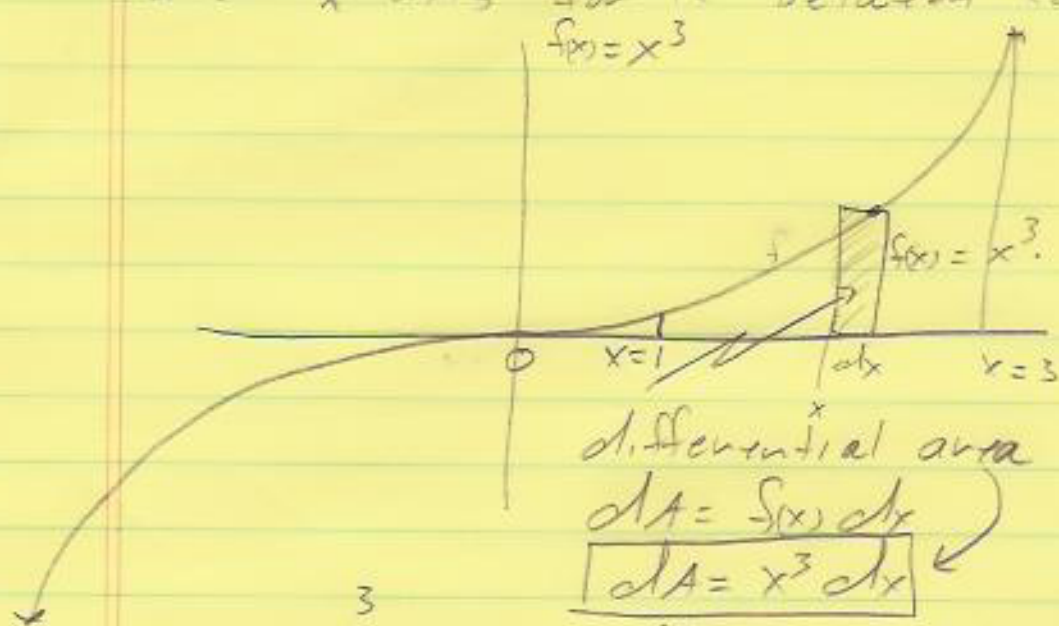


7. Find the area between $f(x) = x^3$ and x -axis for x between $x=1$ and $x=3$.



$$A = \int_{x=1}^3 f(x) dx = \int_{x=1}^3 x^3 dx = \frac{x^4}{4} \Big|_{x=1}^3$$

$$= \frac{3^4}{4} - \frac{1^4}{4} = \frac{81}{4} - \frac{1}{4} = \frac{80}{4} = \boxed{20}$$