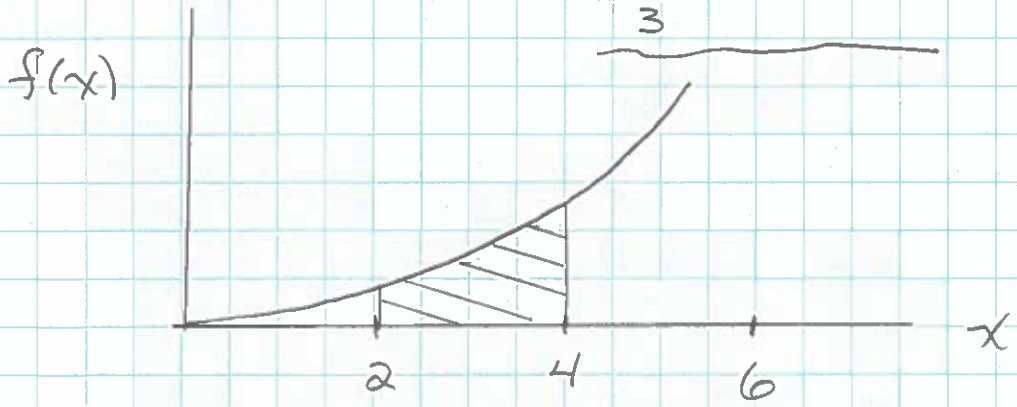
a.) $\int_2^4 5x^2\,dx = 5\int_2^4 x^2\,dx$

$= 5\left(\frac{x^3}{3}\right)\Big|_2^4 = \frac{5}{3}\left(4^3 - 2^3\right)$

$= \frac{280}{3} = 93.33$




b.) $\int_0^{10}(3-6x)\,dx = \int_0^{10} 3\,dx - \int_0^{10} 6x\,dx$

$= \left(3x - 6\frac{x^2}{2}\right)\Big|_0^{10} = 3\left(x - x^2\right)\Big|_0^{10}$

$= 3\left[(10 - 10^2) - (0 - 0)\right]$

$= -270$