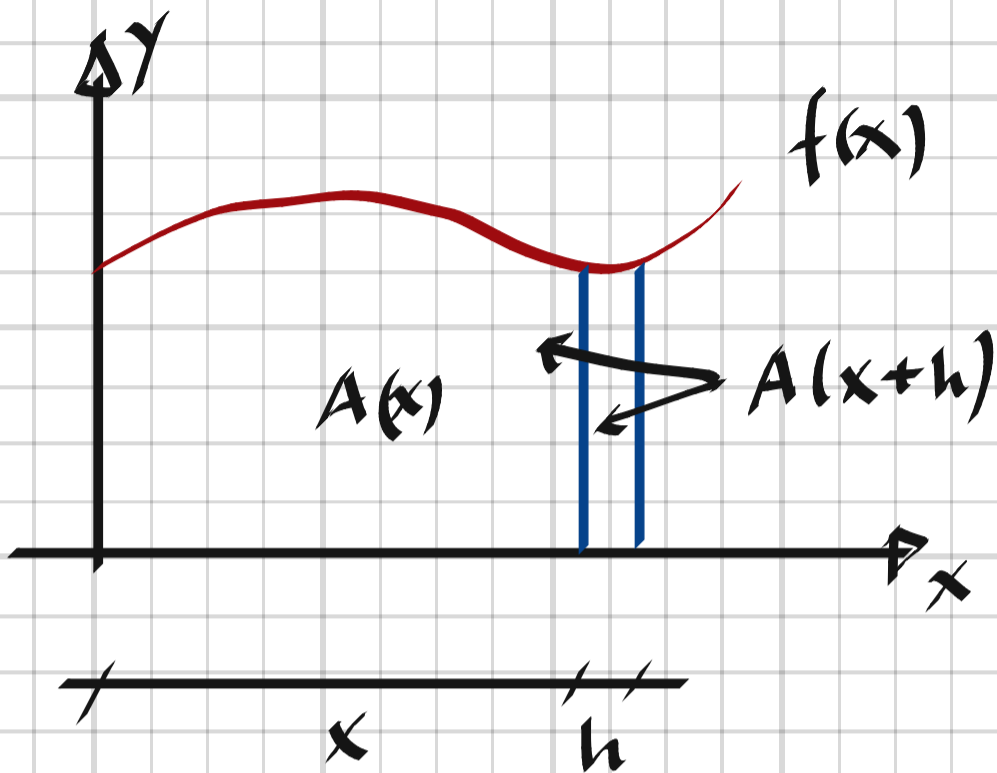


# Integral och area



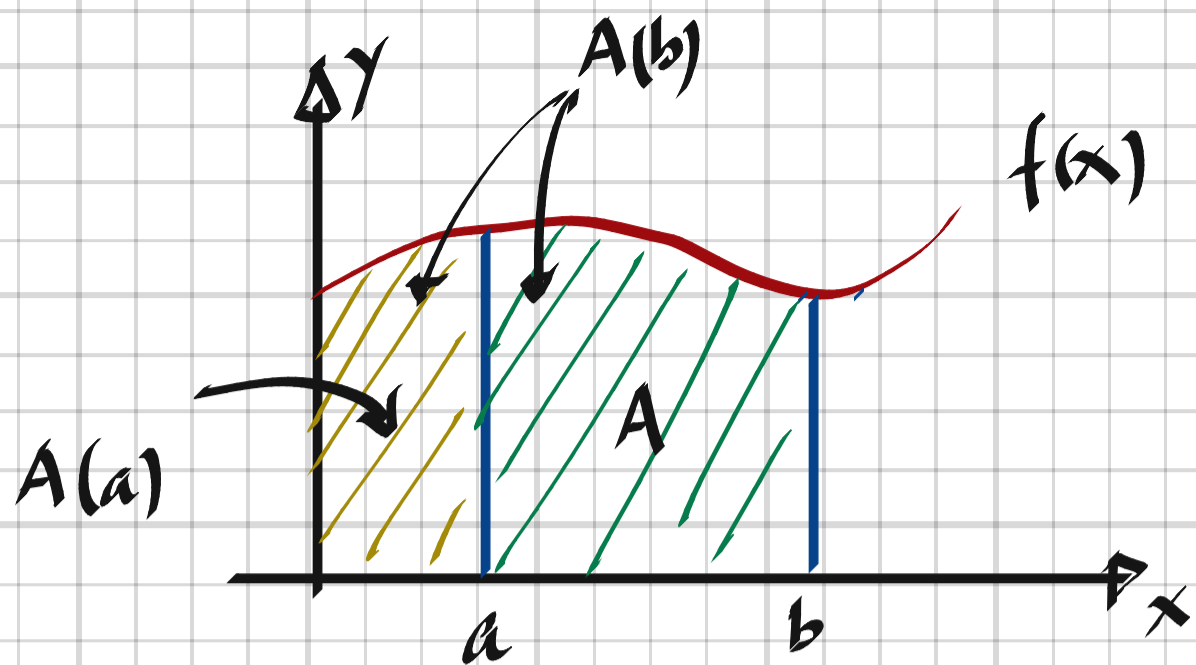
$$f(x) \cdot h \approx A(x+h) - A(x)$$

$$f(x) \approx \frac{A(x+h) - A(x)}{h}$$

$$f(x) = \lim_{h \rightarrow 0} \frac{A(x+h) - A(x)}{h}$$

$$f(x) = A'(x) \Rightarrow$$

$$A(x) = F(x) = \int_0^x f(x) dx$$



$$A = A(b) - A(a) = F(b) - F(a) \Rightarrow$$

$$A = \int_a^b f(x) dx = F(b) - F(a)$$