

3a

$$\int_a^b f(x) dx = \int f(x)$$

$$f(x) = x$$

$$\int_0^{2h} x dx = \int f(x)$$

$$x^2 \Big|_0^{2h} = h \left( \frac{1}{3} x_0 + \frac{4}{3} f(x_1) + \frac{2}{3} f(x_2) \right)$$

$$2h^2 = h \left( \frac{4}{3} h + \frac{4}{3} h \right)$$

$$2h^2 = 2h^2$$