

$$f(x) = 2^x \ln(x - 2)$$

simpson 3/8 simple

$$h = \frac{b - a}{3} = \frac{6 - 3}{3} = 1$$

$$intervalos = \{3, 4, 5, 6\}$$

$$\int_a^b f(x) dx = (b - a) \left[\frac{f(x_0) + 3f(x_1) + 3f(x_2) + f(x_3)}{8} \right]$$

$$\begin{aligned} \int_3^6 2^x \ln(x - 2) dx &= (6 - 3) \left[\frac{f(3) + 3f(4) + 3f(5) + f(6)}{8} \right] \\ &= 85.29775631 \end{aligned}$$