$f(x) = senx$

simpson 1/3 compuesto con 6 intervalos

$$h = \frac{b-a}{n} = \frac{3-0}{6} = 0.5$$

$$intervalos = \{0,0.5,1,1.5,2,2.5,3\}$$

$$subintervalos = \{0.25,0.75,1.25,1.75,2.25,2.75\}$$

$$\int_a^b f(x)\,dx = (b-a)\left[\frac{f(x_0) + 4\sum_{i=1}^{n} f(x_{mi}) + 2\sum_{i=1}^{n-1} f(x_i) + f(x_n)}{6n}\right]$$

$$\int_0^3 senx\,dx = (3-0)\left[\frac{f(0) + 4(f(0.25) + f(0.75) + f(1.25) + f(1.75) + f(2.25) + f(2.75)) + 2(f(0.5) + f(1) + f(1.5) + f(2) + f(2.5)) + f(3)}{6(6)}\right]$$

$$= 1.990036006$$