

Método de Simpson.

$$a=0 \quad b=1 \quad n=2$$

$$\int_0^1 \sqrt{1+x^3} dx$$

$$A_1 = \frac{b-a}{3} (f(a) + 4f(\frac{a+b}{2}) + f(b))$$

$$A_1 = \frac{1}{6} (\sqrt{1+0^3} + 4\sqrt{1+\frac{1}{8}} + \sqrt{1+1^3})$$

$$A_1 = \frac{1}{6} (1 + (4)\sqrt{\frac{9}{8}} + \sqrt{2}) \approx 1.1094$$

