http://www.mbstudent.com/maths-examples.html

Definite integral example

Calculate definite integral of function for border values

$$\int_0^{2\cdot\pi} \sin x \cdot dx$$

$$\int_0^{2\cdot\pi} \sin x \cdot dx = [-\cos x]_0^{2\cdot\pi}$$

$$[-\cos x]_0^{2\cdot\pi} = -\cos 2\cdot\pi - (-\cos 0) = -1 - (-1) = -1 + 1 = 0$$