

Answer on Question #46049 – Math – Integral Calculus

Question:

Integrate with respect to x :

$$\int 10 x dx$$

Solution:

$$\int x^n dx = \frac{x^{n+1}}{n+1} + C, \quad \text{if } n \neq -1$$

Then

$$\int 10 x dx = 10 \cdot \frac{x^2}{2} + C = 5 \cdot x^2 + C, \text{ where } C \text{ is an arbitrary real constant.}$$