Answer on Question #50933 – Math – Integral Calculus

Integrate with respect to x :
∫secxtanxdx

Solution

$$\int \sec x \cdot \tan x \, dx = \int \frac{\sin x}{\cos^2 x} dx =$$

$$= \left| u = \sec x \, , du = \left(\frac{1}{\cos x}\right)' dx = -\frac{-\sin x}{\cos^2 x} dx = \sec x \cdot \tan x dx \right| =$$

$= \int du = u = \sec x + C$, where C is an arbitrary real constant.

Answer: ∫secxtanxdx=secx+C