

Answer on Question #55937 – Math – Calculus

Question

Write difference between \int_C and \oint_C .

Solution

\int_C defines a line integral. This is an integral where the function to be integrated is evaluated along a curve. The terms as path integral, curve integral, and curvilinear integral are also used; contour integral as well, although that is typically reserved for line integrals in the complex plane.

\oint_C defines a circulation. It is the line integral around a closed curve of the velocity field. Circulation is normally denoted Γ (Greek uppercase gamma). Circulation was first used independently by Frederick Lanchester, Wilhelm Kutta, and Nikolai Zhukovsky.