

Connections: Integrals of the Form $\int F_n(x)dx$, Reduction Formulas, and Finite Series Representations

Christopher Jones, Harford Community College

Abstract

The purpose of the article is to demonstrate connections between specific integral forms, integral reduction formulas, as well as the derivation and use of a finite series (when appropriate) to replace integral reduction formulas. In addition, further example problems are provided for use for class discussion or an assignment.



Christopher Jones is an associate professor at Harford Community College. He serves as the coordinator for Harford's Honors Program and serves as the lead faculty adviser for the Rho Beta Chapter of Phi Theta Kappa. Chris has developed and instructed a variety of courses and programs at Harford and is a recipient of the NISOD award as well as the John and Suanne Roueche Excellence award. He holds a MS in applied mathematics from Towson University.