Chapter 8: Improper Integrals & Integration Techniques

Upon successful completion of Chapter 8, the student should be able to:

Recognize and describe how an integral can be "improper"

Evaluate improper integrals as limits of ordinary integrals

Evaluate integrals using the method of Integration by Parts

Evaluate integrals using the method of Partial Fraction Decomposition

Evaluate integrals using the method of Trigonometric Substitution

Evaluate trigonometric function integrals using identities and substitutions

Determine which integration method is most appropriate for a given integration problem and then apply that method to calculate an antiderivative