

Unit 5: Basics of Integrals

Having basic tools and techniques is essential for success

5A Understanding the Concept of an Integral

Explain the "net change" an integral finds				
Explain what an integral calculates				
Find integral values for functions whose graphs are piece-wise, simple geometry forms				
Recall and apply properties of integrals				

5B Understanding Integral Estimations

Use various types of Riemann sums to estimate integral values				
Use other methods to approximate integral values				

5C Understanding the Mean Value Theorem for Integrals

Explain the meaning of the MVT				
Find values guaranteed by the MVT				

5D Understanding the Fundamental Theorem of Calculus Part 1: The Accumulator Function

Find values for accumulator functions				
Graph accumulator functions				
Find derivatives of accumulator functions				

5E Understanding the Fundamental Theorem of Calculus Part 2: The Evaluative Form

Find basic antiderivatives				
Evaluate definite integrals with basic antiderivatives				

5F* Understanding Improper Integrals

Evaluate improper integrals with an infinite bound				
Evaluate improper integrals with an infinite discontinuity				