

Reading Quiz 08 for Calculus 3096

Name : _____ Student ID # : _____ Score : _____

Read pages 298-301, 318-322, 326-329, 335, 339 of chapter 6

1. What does it mean to antidifferentiate a function?

2. State the formula for $\int h(x) dx$ for each of the following functions.

(a) $\int x^r (r \neq -1) dx =$

(b) $\int e^x dx =$

(c) $\int \frac{1}{x} dx =$

(d) $\int kf(x) dx =$

(e) $\int f(x) + g(x) dx =$

3. State the Fundamental Theorem of Calculus.

4. Outline a procedure for finding the area of the region bounded by two curves.

5. State the formula for each of the following quantities:

(a) average value of a function f on the interval $[a, b]$

(b) volume of a solid of revolution