

Reading Quiz 09 for Calculus 3096

Name : _____ Student ID # : _____ Score : _____

Read pages 419-424, 431-434 of chapter 9

1. State the 1st half of the integration formulas in page 420:

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

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

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

2. State those 4 steps for Integration by Substitution in page 422.

3. Evaluate each of the following indefinite integrals and definite integrals.

(a) $\int \frac{2x}{x^2 + 1} dx$

(b) $\int \frac{x}{\sqrt{1 - 4x^2}} dx$

(c) $\int \frac{e^{\sqrt{x}}}{\sqrt{x}} dx$

(d) $\int_0^5 \frac{x}{\sqrt{x+4}} dx$

(e) $\int_{-2}^0 2t^2 \sqrt{1 - 4t^3} dt$

(f) $\int_3^5 x \sqrt{x^2 - 9} dx$