

10.3 u substitution Definite Integrals

NAME: _____

Corrective Assignment #2

DATE: _____

Evaluate the definite integral.

1. $\int_0^1 x^3(2x^4 + 1)^2 dx$

2. $\int_0^1 x \sqrt{1 - x^2} dx$

3. $\int_0^2 \frac{x}{\sqrt{1 + 2x^2}} dx$

4. $\int_0^1 e^{-2x} dx$

Evaluate the definite integrals.

$$5. \int_e^{e^2} \frac{1}{x \ln x} dx$$

$$6. \int_0^{\frac{\pi}{12}} \frac{\cos(2x)}{\sin(2x) + 1} dx$$

ANSWERS TO CORRECTIVE ASSIGNMENT

1. $\frac{13}{12}$	2. $\frac{1}{3}$	3. 1	4. $\frac{1}{2} - \frac{1}{2e^2}$
5. $\ln 2$	6. $\frac{1}{2} \ln\left(\frac{3}{2}\right)$		