

Challenge Problems:

Compute

$$3) \int \frac{1 - 3x^2 e^{(1-x^3)}}{x + e^{(1-x^3)}} dx = \int \frac{1}{u} du = \ln|u| + C$$

$$u = x + e^{1-x^3}$$

$$= \ln|x + e^{1-x^3}| + C$$

$$du = (1 - 3x^2 e^{1-x^3}) dx$$