

Math 21B ESP Quiz 2 (Kouba)

Please PRINT your name here : _____

This quiz is due next Tuesday at the beginning of ESP.

1.) (10 pts. each) Find the indefinite integral for each.

a.) $\int \frac{x^2 + 1}{x^3} dx$

b.) $\int \frac{x^3}{x^2 + 1} dx$

2.) (5 pts. each) Differentiate each of the follow functions. Use proper notation and show clear steps.

a.) $F(x) = \int_2^x e^{t^2} dt$

b.) $F(x) = \int_x^{100} e^{t^2} dt$

c.) $F(x) = \int_0^{3x} e^{t^2} dt$

d.) $F(x) = \int_{x^2}^{x^3} e^{t^2} dt$