Quiz 4

Davis
M212

Name:
Pledge:

(9pts.) 1. Use integration tables to integrate the following:

a. $\int \frac{y^2+4y+6}{y^2+4y+5} dy$

b. $\int (x^3 - 5x + 2)e^{-2x} dx$

c. $\int \sin^4(x) \cos^2(x) dx$

(11pts.) 2. Match the slope fields with their differential equations. Then choose two of the differential equations to solve algebraically by separation of variables.

a. $\frac{dy}{dx} = y + x^2 y$

b. $\frac{dy}{dx} = xy^2 \sin(x^2)$

c. $\frac{dy}{dx} = y + xy$

d. $\frac{dy}{dx} = xe^y$