

Name: _____

Math 211 Quiz 11

Section: 302 303

Apr 25, 2012

1. Find the indicated integral.

a. $\int (x + 1)^9 dx$ **b.** $\int \frac{1}{x - 1} dx$ **c.** $\int \sqrt{2x + 1} dx$ **d.** $\int \frac{x}{2x + 1} dx$

2. Find the indicated integral.

a. $\int t\sqrt{t^2 + 1} dt$ **b.** $\int t^2(t^3 - 1)^5 dt$ **c.** $\int x^4 e^{x^5 - 1} dx$ **d.** $\int \frac{\ln x}{x} dx$

Bonus problem. Solve the given initial value problem for $y = f(x)$.

$$\frac{dy}{dx} = \frac{x+2}{x^2+4x+5}, y(-1) = 3$$