

Calculus II - Fall 2014 - Mr. Clontz - Quiz 08

Fill in the circle with the correct answer for each of the following problems.

Name: _____ 9am / 10am

1. (10 points) Rewrite $\int \frac{7x - 5}{4x^2 + 11x - 3} dx$ using partial fraction decomposition.

☐ $\int \frac{1}{x + 3} - \frac{1}{4x - 1} dx$

☐ $\int \frac{2}{x + 3} - \frac{1}{4x - 1} dx$

☐ $\int \frac{3}{x + 3} + \frac{2}{4x - 1} dx$

☐ $\int \frac{4}{x + 3} + \frac{2}{4x - 1} dx$

☐ None of these.

2. (10 points) Rewrite $\int \frac{2x^3 + x^2 + 1}{x^2(x^2 + 1)} dx$ using partial fraction decomposition.

☐ $\int \frac{1}{x^2} + \frac{2x}{x^2 + 1} dx$

☐ $\int \frac{1}{x} + \frac{1}{x^2} + \frac{1 + 2x}{x^2 + 1} dx$

☐ $\int \frac{1}{x^2} + \frac{1}{x + 1} + \frac{2x}{x^2 + 1} dx$

☐ $\int \frac{1}{x^2} + \frac{1 + 2x}{x^2 + 1} dx$

☐ None of these.