

Calculus II - Fall 2014 - Mr. Clontz - Quiz 07

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

Name: _____ 9am / 10am

1. (10 points) Evaluate $\int \frac{1}{(4-x^2)^{3/2}} dx$.

☐ $\frac{(4-x^2)^{3/2}}{2x} + C$

☐ $\frac{\sqrt{4-x^2}}{4x} + C$

☐ $\frac{x}{4\sqrt{4-x^2}} + C$

☐ $\frac{3x}{(4-x^2)^{5/2}} + C$

☐ None of these.

2. (10 points) Evaluate $\int \frac{2x^3}{x^2+1}$.

☐ $2 - \ln|x| + C$

☐ $2 - \arctan(x^2+1) + C$

☐ $x^2 - \arctan(x) + C$

☐ $x^2 - \ln(x^2+1) + C$

☐ None of these.