

Circle your Instructor: Faudree, Williams, Zirbes

_____ / 15

Name: _____

This is a 30 minute quiz. There are 15 problems. Books, notes, calculators or any other aids are prohibited. Calculators and notes are not allowed. **Your answers should be simplified unless otherwise stated.** There is no partial credit. If you have any questions, please raise your hand.

Circle your final answer.

For each function below, find the definite or indefinite integral.

1. $\int_0^1 (1 - 15v^4 + 16v^7)dv$

2. $\int \cos(3\pi x)dx$

3. $\int \frac{t^2 - 2}{\sqrt{t}}dt$

4. $\int \frac{7x^2}{2+x^3} dx$

5. $\int_0^1 \frac{6}{x^2+1} dx$

6. $\int \frac{\sin x}{\cos^3 x} dx$

7. $\int \frac{e^{1/x}}{x^2} dx$

8. $\int \frac{4x}{\sqrt{1-x^2}} dx$

9. $\int_0^1 (6 + 10^x) dx$

10. $\int e^{-5r} dr$

11. $\int \sec \theta (\sec \theta + \tan \theta) d\theta$

12. $\int \frac{1}{(6x-1)^{1/3}} dx$

13. $\int \frac{\ln x}{x} dx$

14. $\int \left(\sqrt{3x} + \frac{x}{2} + \frac{2}{x} \right) dx$

15. $\int \sin x \sin(\cos x) dx$