

Circle your Instructor: Faudree, Williams, Zirbes

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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. $\int_0^1 (1 + 8v^3 - 24v^7)dv$

2. $\int \cos(5\pi x)dx$

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

4. $\int \frac{3x^4}{2+x^5} dx$

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

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

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

8. $\int_0^1 (4 + 9^x) dx$

9. $\int e^{-2r} dr$

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

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

12. $\int \frac{1}{(9x-1)^{1/3}} dx$

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

14. $\int \left(\sqrt{3x} + \frac{x}{5} + \frac{5}{x} \right) dx$

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