

QUIZ 10 - MATH 112

Friday, April 25

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it and do only what is asked. Each problem is worth around 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. [6 points] Compute the following integrals using substitution.

(a) $\int 2x^3(3x^4 + 1)^5 dx$

(b) $\int x^2 e^{x^3+5} dx$

1. [4 points] Use the by-parts method to compute the indefinite integral

$$\int \frac{\ln x}{x^5} dx.$$

(**Hint:** First, bring the power upstairs; then choose u and dv .)