

QUIZ 9 - MATH 112

Thursday, 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] Use substitution to compute the integrals, showing all steps.

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

$$\int \frac{8x}{x^2 + 1} dx$$

2. [6 points] Use by-parts to compute the integrals, showing all steps. It is up to you whether you want to use the by-parts formula (without u, v) or the by-parts method (with u, v).

$$\int x e^{-4x} dx$$

$$\int 3x(x+5)^7 dx$$