

YOUR NAME: _____

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

1. Use integration by substitution to evaluate the integral $\int \frac{e^{3x}}{e^{3x} + 21} dx$.

2. Use integration by parts to evaluate $\int x e^{-x} dx$.