

Name (Last, First Middle): _____

Use of books, notes or calculators is **NOT** permitted. **Show all your work!** Answers without appropriate supporting work may not receive full credit. Clearly indicate your answers to each problem by underlining them or placing a box around your answers!

1. [50] Find $\int x^2 \sin(x^3 + 1) dx$.

2. [50] Calculate $\int_1^e \frac{\ln x}{x} dx$