

Math 142, Exam 1, Fall 2015

Write everything on the blank paper provided. **You should KEEP this piece of paper.** If possible: return the problems in order (use as much paper as necessary), use only one side of each piece of paper, and leave 1 square inch in the upper left hand corner for the staple. If you forget some of these requests, don't worry about it – I will still grade your exam.

The exam is worth 50 points. Each problem is worth 10 points. Please make your work coherent, complete, and correct. Please **CIRCLE** your answer. Please **CHECK** your answer whenever possible.

No Calculators or Cell phones.

1. Find $\int \sin^2 x \cos^3 x dx$. **Please check your answer.**
2. Find $\int \frac{dx}{\sqrt{x^2 + 2x + 17}}$. **Please check your answer.**
3. Find $\int \frac{xdx}{e^{3x}}$. **Please check your answer.**
4. Find $\int e^{7x} \sin x dx$. **Please check your answer.**
5. Find $\int \frac{x^4}{\sqrt[3]{1+x^5}} dx$. **Please check your answer.**