

Name: _____ Section: _____

Instructions: Show all your work in order to receive proper credit. No formula sheets and no notes are allowed during the quiz. No cell phones, calculators, or any other electronic devices are allowed in a student's possession during any quiz. All such devices must be put away in the student's bag, out of reach of the student during the quiz. Quiz should be completed in one seating with no breaks. Your work must be written clearly using proper notation. Answers must be justified using techniques that have been taught in this course. Good luck! **Timing:** 15 minutes

1. (3 pts) Evaluate the integral. **Simplify your final answer as much as possible.**

$$\int_1^8 \left(2 + \frac{1}{x} - 4\sqrt[3]{x} \right) dx$$

2. (3 pts) Evaluate the integral. **Simplify your final answer as much as possible.**

$$\int_0^{\pi} e^{\cos t} \sin t \, dt$$

3. (4 pts) Find the area of the region under the the graph of $y = \frac{e^{\sqrt{t}}}{\sqrt{t}}$ above the t -axis on the interval of $[4, 25]$. **Simplify your final answer as much as possible.**