Please complete the following problem(s) in the space provided. You may use an approved calculator. You will have 15 minutes to complete the quiz.

Please include all relevant intermediate calculations and explain your work when appropriate.

Problem 1. Evaluate the integral
\[ \int 6x\sqrt{2x^2 + 1} \, dx. \]

Problem 2. Evaluate the integral
\[ \int \frac{5e^{1/x}}{x^2} \, dx. \]