

Calculus II. Quiz 3. Name _____ Time _____

Show all work on this page for full and/or partial credit. Put a box around your final answers in each part.

1. Find the average value of the function $f(x) = \frac{x+3}{\sqrt{x}}$ on the interval $[1, 9]$.

2. Evaluate the definite integral. You must show the steps of integration by parts. $\int_1^2 x^4 \ln(x) dx$

3. Find the indefinite integral. You must show the steps of integration by parts. $\int e^{3x} \sin(4x) dx$