

236 Quiz 1

January 18, 2011.

Name _____

By printing my name I pledge to uphold the Honor Code.

Work individually. You may use your Notebooks but no loose papers, photocopies, books, calculators, cell phones, or other resources. To get full credit you must clearly and concisely show/explain/justify your work, so please think about what you write and how you write it.

1. Sketch the graph of some function $f(x)$ on $[2, 5]$ for which SIMP(6) is an over-approximation for $\int_a^b f(x) dx$. (Note $n = 6$ means that $\frac{6}{2} = 3$ parabolas are involved.)

2. Find $\lim_{x \rightarrow \infty} \frac{3}{e^{-x} - 1}$. (this is from the WebWork assignment)

3. Find $\int_1^3 \frac{e^{3x}}{2 + e^{3x}} dx$. (you need not simplify the number)