

Math 152 Quiz #1
January 12, 2010

Name: _____

Show all work on a separate sheet. Put a box around your final answer. No calculators are permitted.

- (3 pts.) Find $g(x)$ if $g'(x) = 2e^x - 6x^2 + \sin x$ and $g(0) = 3$.
- (2 pts.) Write $\sum_{j=2}^6 \tan(j\pi)$ in expanded form and evaluate the sum.
- (3 pts.) The table below gives the velocity of an armadillo. Approximate the distance traveled by the armadillo from $t = 0$ to $t = 16$ by using the velocities at the beginning of the time intervals.

time (minutes)	0	4	8	12	16
velocity (feet/min)	3	2.5	2	1	0.5

- (2 pts.) For the graph of $f(t)$ shown, find $\int_{-2}^8 f(t) dt$.

