PRINT Your Name:_____

Quiz 1 — August 26, 2012 – Section 2 – 4:40 – 5:30

Remove everything from your desk except this page and a pencil or pen.
The solution will be posted soon after the quiz is given.

Circle your answer. **Show your work. Your work must be correct and coherent.**
The quiz is worth 5 points.

Find $\int_0^{13} \frac{dx}{\sqrt[3]{(1+2x)^2}}$.

Answer: Let $u = 1+2x$. Then $du = 2dx$. When $x = 0$, then $u = 1$. When $x = 13$, then $u = 27$. The integral is equal to

$$\tfrac{1}{2}\int_1^{27} u^{-2/3}du = \tfrac{1}{2}3u^{1/3}\Big|_1^{27} = \tfrac{3}{2}(3-1) = \boxed{3}.$$