

Thu Nov 15 15:48:10 MST 2007

/m160.fa07/handouts160/qB16/qB16_160

These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1 By the Fundamental Theorem of Calculus,

$$\begin{aligned}\int_4^{25} \frac{1}{\sqrt{x}} dx &= \int_4^{25} x^{-1/2} dx \\ &= \frac{x^{1/2}}{1/2} \Big|_4^{25} = 2x^{1/2} \Big|_4^{25} = 2 \left(\sqrt{x} \Big|_4^{25} \right) \\ &= 2(\sqrt{25} - \sqrt{4}) = 2(5 - 2) = 6\end{aligned}$$

2

$$\sum_{k=4}^8 (2k-1) = (2(4)-1) + (2(5)-1) + (2(6)-1) + (2(7)-1) + (2(8)-1) = 7+9+11+13+15 = 55$$

Thu Nov 15 15:48:10 MST 2007

/m160.fa07/handouts160/qB16/qB16_160