Take-Home Quiz 4

Math 132 Section 22

Due Monday, February 6, 2006

Problem 1. (2 points). Compute $\int x^2 - 2x + 1\,dx$. Be sure to show your work!

Problem 2. (2 points). Compute $\int \frac{\theta^2 + \cos\theta}{3}\,d\theta$.

Problem 3. (2 points). Compute $\int 2x\cos(x^2)\,dx$.

Problem 4. (2 points). Compute $\sum_{n=1}^{6} n - 2$.

Problem 5. (2 points). Compute $\sum_{n=1}^{17}(-1)^n$.

Problem 6. (2 points). Compute $\sum_{n=0}^{100}(n+1)^{10} - n^{10}$.

Problem 7. (2 points). Compute $\sum_{n=1}^{9} \frac{1}{n^2+n}$. *Hint:* Rewrite the fraction as the difference of two fractions.