1 pm

Quiz 5

Spring 2012 **Your name:** _____

Math 0220 **Your TA's name:** _____

No calculators. Show all your work (no work = no credit). Write neatly.

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1. (5 points) Evaluate the integrals by interpreting it in terms of areas

$$\int_{-2}^{5} |2x - 6|\, dx$$

2. (10 points) Evaluate the integrals.

(a) (5 points) $\displaystyle\int_0^1 \left(2x^3 - \frac{3}{x^2+1}\right) dx$

(b) (5 points) $\displaystyle\int_0^1 5^x \, dx$

test problem [10 points] Use Newton's Method to determine the second approximation to the solution to $\sin 3x = \cos x$ using $x_1 = \pi/6$ as an initial guess. Simplify your answer as much as possible.