201-G11 Worksheet 5.1 – 5.4
Fall, 2012 Name_____

Evaluate the following definite integrals in two ways:

I. As the limit of a Riemann sum, using right endpoints. (S 5.2)
II. By the Fundamental Theorem of Calculus, Part 2 (S 5.4)

Any time you can use previous work, you *should*, and just refer the reader back to it.

1. $\int_1^3 3dx$

2. $\int_1^3 4xdx$

3. $\int_1^3 x^2 dx$

4. $\int_1^3 \left(x^2 - 4x + 3\right) dx$

5. What is the average value of $f(x) = x^2 - 4x + 3$ on the interval $[1,3]$?

6. What value *c* satisfies the conclusion of the Mean Value Theorem for Integrals for $f(x) = x^2 - 4x + 3$ on the interval $[1,3]$?