Math 241: HW 14

Due on Friday, November 1

Fall '13

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Problem 1

Compute the following (no simplification necessary) using the formulas given in class:

$$\sum_{k=1}^{300} k =$$

$$\sum_{k=200}^{356} k =$$

$$\sum_{k=1}^{73} k^2 =$$

Problem 2

Use a limit and a summation to find the area under the given curve for the given function. Note: It may help to look over page $262 - 263$ of the text for some helpful algebraic manipulations.

$$f(x) = x^2 + 3 \quad \text{on } [0, 4]$$

$$f(x) = 5x^2 \quad \text{on } [0, 7]$$

$$f(x) = 2x^3 \quad \text{on } [0, 2]$$

$$f(x) = x^2 + 3x \quad \text{on } [0, 3]$$