Name: _____ **Panther ID:** _____

Worksheet 1 Calculus II Spring 2013

1. (a) Show that $1 + 3 + 5 + ... + (2n - 1) = n^2$.

(b) Find a simple formula for $1^2 + 3^2 + 5^2 + ... + (2n - 1)^2$

2. This is the equivalent of exercise 53, p. 351 textbook, for the function $y = x^2$.
(a) Show that the area under the graph of $y = x^2$ and over the interval $[0, b]$ is $b^3/3$.

(b) Find a formula for the area under the graph of $y = x^2$ and over the interval $[a, b]$.