

CSE 254, S08, Big-Oh HW, Due 3/4/08, Dr. T. J. Peters

1. Show that $2 + 4 + 6 + \dots + 2n$ is $O(n^2)$.
2. Show that $1^2 + 2^2 + 3^2 + \dots + n^2$ is $O(n^3)$.
3. Show that $\sum_{i=1}^n (4i - 9)$ is $O(n^2)$.
5. Show that the following algorithm is $O(n^3)$:
for i = 1, n
 for j = i, n
 for k = j, n
print 'hello'
 endfor
 endfor
endfor