

Big-O

True or False?

1. n^2 is $O(n^3)$?
2. n^3 is $O(n^3 - 200)$?
3. n^3 is $O(n^2)$?
4. n^2 is $O(n^3 - 200n)$?
5. $5n^2 + 1000$ is $O(n^3)$?
6. n^n is $O(n!)$?
7. $n!$ is $O(n^n)$?
8. $2^{\log n}$ is $O(n)$?