

## Notation conventions to be used in answers to online quizzes

REFRESH this page to make sure you are reading the most recent version.

1. **Do not put any spaces in your answers.**
2. (The matching is case insensitive).
3. When I ask for the dominant term, I want JUST the term, no multiplication constant. If I want to see the multiplication constant as well, there will be a separate box/answer for it.
4. Rules for constants:
  - a. Do not simplify a fraction or perform the division. I am using the multiplication constant to verify if you did a summation and what type of summation you performed. E.g. the answer should be  $(2*3)/4$  and NOT  $3/2$ , or 1.5.
5. Change of variable with summation: Use new variable name  $x$  and  $p$  for the last value the variable  $x$  take. In the closed form the answer can have  $p$  (to make things simpler), BUT the final answer for Theta, cannot have  $p$  or  $x$  in it. It must be the correct answer for Theta for that piece of code.
6. If you are in doubt about what notation to use, contact the instructor if possible. If not, put a comment in you can, or email the instructor with your comments/choice/issues. When Camera Monitor is used, you can leave a voice message in the video recording regarding the issue you have and the assumption you are making and email me after the quiz to let me know you left a voice message in the video.
7. Use the notation  $^$  to show the exponent. E.g.  $5^3 = 5^3$ ,  $n^2 = n^2$ ,  $n^x = n^x$ ;  $n^{2+x} = n^{2+x}$
8. Use the notation  $_x$  to show subscript  $x$ . E.g. to write  $\log_2 n = \log_2(n)$  and  $\log_{2a+b} n = \log_{2a+b}(n)$ .
9. Always use  $()$  for log. E.g.  $\log_2 n = \log_2(n)$ ,  $\lg 10 = \lg(10)$
10. If an answer for Theta includes a log function in it, the log should have the base derived from the math (e.g.  $\log_5(N)$ ).
11. Parenthesize every component that has an exponent (or other expression of several symbols) and do NOT put any spaces. E.g.  $MN = MN$ ,  $M^2 N \lg N = (M^2) N \lg(N)$
12. Order of symbols in an expression:
  - a. If an answer includes several types of function multiplied, list them from the fastest growing to the lowest: exponent, polynomial, log, division. E.g.  $(N/U)M^{2^{MN}} \log_4 T = (2^{\{MN\}})(M^2) N \log_4(T)/U$  [You will probably not have such complex expressions, but I wanted to give a complex example.]
  - b. If several variables show in a term, use the alphabetical order. E.g. use  $MN$  not  $NM$