

MATH 100: Homework #3

Due Thursday, 9/11, before 11:59pm, via a PDF file uploaded to the appropriate Homework under Assignments in the Canvas course page.

All problems require explicit and detailed explanations. Solutions should be written clearly, legibly, and concisely, and will be graded for both mathematical correctness and presentation. Points will be deducted for sloppiness, incoherent or insufficient explanation, or for lack of supporting rationale.

You are allowed to discuss the homework problems with no one except your classmates, the TA, and the instructor. However, the solutions should be written by you and you alone in your own words. **If you discussed HW problems with a classmate or TA, you have to write their name at the top of the HW submission as a collaborator.** Any incident of plagiarism/ cheating (from a person or from any online resource) will be strictly dealt with.

Re-read the [‘Why and How’ of Homework section of the course information sheet](#) for some important advice on the HWs for this course.

Always remember that homework is NOT meant to be an examination, it is meant to assist in your learning and development. If you need help with any HW problem, don't hesitate to ask me. You are encouraged to ask questions during the *Class*, through the *Canvas Discussion Forums*, during the *Office Hours*, during the *TA office hours*, or through *Email to me*.

Submit solutions to each of the following problems.

1. From the textbook *Devlin, Intro to Mathematical Thinking*, submit solutions to the following short exercises:

Section 2.3.3: #1bch, #2ade, #3.

Section 2.3.5: #3, #4, #5.

2. Write a mathematical explanation in your own words of which of the two statements on page 73 of the *Alcock textbook* is true and which is false. Recall our discussion in class.

3. Resubmit Problem 1 from HW#1 after rewriting it based on comments given in your graded HW.