

CS4121 Homework Assignment #4
Due Date: Wednesday, April 3 , 2012 at 9:05am

1. (6 points) Problem 7.2, page 373.
2. (5 points) Problem 7.8, page 375.
3. (26 points) Problem 7.16, page 376, with updates below.
 - (16 points) For Question (a), generate code assuming column-major and row-pointer layout, respectively. You do not need to generate code for row-major layout.
 - (10 points) For Question (b), assume that all arrays use row-major layout.
4. (10 points) Dan and Joe discussed a programming assignment together and wrote the code independently to implement an algorithm calculating π . Their code is attached as pi-Dan.c and pi-Joe.c. Unfortunately, the TA has found that Dan's output disagrees with Joe's when the input is large (1000, for example). Please help the TA to explain to Dan and Joe why their results differ and make two different suggestions to fix the wrong code.