

# FIRST QUIZ

Please read these instructions carefully; they will apply for all our quizzes, but we won't repeat them every time. You have 10 minutes to complete this quiz.

Please read all the problems closely. If you have any questions on what a problem means, don't hesitate to ask. Don't get bogged down on any one problem; if you have trouble on a problem, go on to the next one. Unless a problem specifically asks you to consider errors, you should assume that each problem is correct and solvable, and ask us if you believe otherwise.

Please write your answers clearly—we can't give you credit if we can't decipher what you've written. We'll give partial credit for partially correct answers, so writing something is better than writing nothing. But no question requires an answer longer than two sentences, so don't just write everything you know and hope that the right answer will be included somewhere; we will deduct points for needlessly long answers. Good luck!

## Problem 1 (3 points)

Each of the following statements claims to be a class policy or procedure in Informatics 41. Some are accurate; others are inaccurate, misguided, or wrongheaded. Please indicate which are which.

(a) Students who have questions during lecture should wait until the end or save them for discussion section.

Circle one: ACCURATE / INACCURATE

(b) In pair programming, the navigator should reach over to the keyboard and correct the code whenever an error appears. Circle one: ACCURATE / INACCURATE

(c) Even students with previous programming experience should expect assignments to require some serious thought, time, and effort. Circle one: ACCURATE / INACCURATE

(d) In pair programming, the less experienced partner should defer to the other partner and keep questions to a minimum. Circle one: ACCURATE / INACCURATE

(e) One good way to get answers to course-related questions in between class meetings is to send electronic mail to `i41@uci.edu`. Circle one: ACCURATE / INACCURATE

(f) The partner evaluations for pair programming aren't important because everybody always gives everyone else perfect scores. Circle one: ACCURATE / INACCURATE

## Problem 2 (5 points)

Evaluate each of the following expressions. That is, what does DrScheme display when each of these expressions is executed?

(a) `(* (+ 4 1) (- 3 1))`

(b) `(>= (* 5 4) 15)`

(c) `(define banana  
 (lambda (x y)  
 (+ x (* 2 y))))  
(banana 60 5)`

**Problem 3** (12 points)

Students in Recreational Gastronomy 101 complete a term project, a midterm exam, and a final. A student receives a score from 0 to 100 on each of these items. The project is worth 40% of the course grade, the midterm is worth 25%, and the final is worth 35%.

Write the function `RG-grade` that takes three inputs (representing one student's scores on the project, the midterm, and the final, in that order) and returns the student's overall weighted score in the class (a number between 0 and 100, computed according to the weights given above).

Write a contract, a brief purpose statement, the Scheme function definition, and two tests in the form of boolean expressions that should return true if the function works correctly. Hint: Read the previous sentence carefully to make sure you provide each item we ask for.