

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 from the start of class 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 us. 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)

For each part (a) through (f), choose the single best answer from items A through Q.

- (a) What's the best Email address for course-related questions?
- (b) What is pair programming?
- (c) Where can you find the *Picturing Programs* textbook on the web?
- (d) Informatics 41 lab assignments require pair programming, except for one part. What part of every lab assignment must each student do individually?
- (e) How many scheduled hours of Informatics 41, counting both lecture and lab, should students attend each week?
- (f) What should every student in Informatics 41 want to do?

- | | |
|---|--|
| A. <code>kay@uci.edu</code> | J. The expression evaluation |
| B. Have a career writing software | K. Two people working together on one computer |
| C. Two people dividing up the work | L. The teachpack installation |
| D. <code>i41@uci.edu</code> | M. <code>http://www.infx41text.com/</code> |
| E. Pull at least one software-writing all-nighter | N. 12 |
| F. 9 | O. 6 |
| G. A pair of programmers working independently | P. Learn something about software and software development |
| H. <code>insa@ics.uci.edu</code> | Q. <code>http://www.picturingprograms.com/</code> |
| I. The partner evaluation | |

(continued on reverse)

Problem 2 (4 points)

Evaluate each of the following Scheme expressions. That is, what value does DrRacket display in the interactions window when you enter the expression or click Run? (We may not have said it explicitly, but besides + for addition, Scheme uses - for subtraction, * for multiplication, and / for division. Recall too that the function `string-length` takes a string as its input and returns the number of characters in the string; for example, `(string-length "Hello")` returns 5.)

(a) `(+ 45 2)`

(b) `(* 4 (- 20 5))`

(c) `(/ (* 10 5) (+ 3 2))`

(d) `(+ 20 (string-length "Anteater"))`

Problem 3 (3 points)

After evaluating the two Scheme expressions below, DrRacket displays one number. What is it?

```
(define ANIMAL "Elephant")  
(define FLOWER "Hollyhock")  
(+ (string-length ANIMAL) (string-length FLOWER))
```