

CS 2SC3 and SE 2S03 Fall 2009

Quiz 4 Answer Key

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Question 1

If OCaml accepts a definition of a recursive function, every application of the function will terminate. Is this statement true or false?

A. True.

B. ☒ False.

Question 2

In OCaml what is the type of the empty list []?

- A. `list`.
- B. `'a`.
- C. `int list`.
- D. `'a list`.
- E. It has no type.

Question 3

The `super_sum` function defined in class can be used to

- A. Add values of type `int`.
- B. Add values of type `float`.
- C. Multiply values of type `int`.
- D. Concatenate values of type `string`.
- E. All of the above.

Question 4

Which of the following OCaml phrases defines a curried function?

- A. `let f x = x + 2 ;;.`
- B. `let f (x,y) = x + y ;;.`
- C. `let f x y = x + y ;;.`
- D. `let rec f = function
 | [] -> 0
 | h :: t -> 1 + (f t) ;;.`
- E. `let f () = true ;;.`

Question 5

Which of the following OCaml phrases defines `comp` to be function composition?

- A. `let comp f g = function x -> (f x) + (f x) ;;`
- B. `let comp f g = function x -> (f x) * (f x) ;;.`
- C. `let comp f = function x -> f (f x) ;;.`
- D. `let comp f g = function x -> f (g x) ;;.`
- E. `let comp f g = function x -> f g x ;;`