CS 2SC3 and SE 2S03 Fall 2009

Quiz 3 Answer Key

William M. Farmer

Department of Computing and Software
McMaster University

2 October 2009

Question 1

Some irrational numbers can be represented by floating point numbers. Is this statement true or false?

A. True.

B. False.

Question 2

In OCaml the || operator is commutative, i.e., the result of evaluating

    x || y

is always the same as the result of evaluating

    y || x.

Is this statement true or false?

A. True.

B. False.

Question 3

George Boole noticed that the logical *and* operator is analogous to the set-theoretic _____ operator.

   A. Conjunction.

   B. Disjunction.

   C. Union.

   D. Intersection.

   E. Complement.

Question 4

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

A. `list`.

B. `emptylist`.

C. `int list`.

D. `'a list`.

E. It has no type.

Question 5

Suppose `x` is bound to the OCaml list `[1;2;3;4]`. Which expression evaluates to the last member of this list?

A. `x[4]`.

B. `x[3]`.

C. `List.hd (List.hd (List.hd (List.hd x)))`.

D. `List.hd (List.tl (List.tl (List.tl x)))`.

E. `(snd (snd (snd x)))`.