Unit 2 - Week 1: Introduction

Assignment 1

The due date for submitting this assignment has passed.   **Due on 2019-09-11, 23:59 IST.**
As per our records you have not submitted this assignment.

1) Consider the following Haskell definition.   *1 point*

    f x y z = x || not (not y /= z)

    Which of the following is a possible type of f?

- ( ) (Bool, Bool, Bool) -> Bool
- ( ) Bool -> Bool -> Int -> Bool
- ( ) Bool -> Int -> Int -> Bool
- ( ) Bool -> Bool -> Bool -> Bool

No, the answer is incorrect.
Score: 0
Accepted Answers:
Bool -> Bool -> Bool -> Bool

2) Consider the following Haskell definition.   *1 point*

    f x y z = not (x < y) == (y < z || z > 0)

    If f x y 2 returns False, which of the following four input combinations are possible?

- ( ) x = 0, y = 0
- ( ) x = 0, y = 1
- ( ) x = 1, y = 0
- ( ) x = 1, y = 1

No, the answer is incorrect.
Score: 0
Accepted Answers:
x = 0, y = 1

3) Consider the following incomplete definition of the NOR function (NOR x y = True if and only if both x and y are   *1 point*
False).

    f3 True _ = False
    f3 _ y   = ...

    Which of the following is a correct replacement for the ... ?

- ( ) False
- ( ) not y
- ( ) True
- ( ) y

No, the answer is incorrect.
Score: 0
Accepted Answers:
not y

4) Consider the following recursive function definitions.   *1 point*

    f 0 = 1
    f n = g n n

    g n 0 = 1
    g n i = g n (i-1) + h i (n+1)

    h 0 n = 1
    h i n = h (i-1) (n-1) + h (i-1) (n+1)

    What is the value of f 8?

    [⇅]

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 511

5) Consider the following recursive definition.   *1 point*

    f n = g n 0

    g n a
        | n == 0   = a
        | otherwise   = g q (10*a + r)
              where
                  q = div n 10
                  r = mod n 10

    What is the value of f 5578?

    [⇅]

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Type: Numeric) 8755

1 point