Assignment 4

**Part 1**:

Question 1:zxv

1. {f : [T1 → T2], g : [T1 → T2], a : T1} ` (f (g a)) : T2

False.   
 receives but return .

1. {x : T1, y : T2, f : [T2 → T1]} ` (f y) : T1

True.

is of type and indeed receives . Also, returns which is exactly as needed.

1. {f : [T1 → T2]} ` (lambda (x) (f x)) : [T1 → T2]

True.

Given , the will “give” it to which will operate on it and return .

(The is somewhat redundant).

1. {f : [T1 ∗ T2 → T3]} ` (lambda (x) (f x 100)) : [T1 → T3]

False.

receives two arguments which are of types and but doesn’t have to be a number.

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We can conclude .