PPL 3rd Assignment

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1st Question

a. **False**. *F gets an argument of type T2 while we pass it an argument of type number which is not necessarily of type T2.*
b. **False**. *f* gets only 1 argument, but we try to pass it 2 arguments.
c. **True**. *x* has no specific type so we can assume its type to be *T1*, which we can pass to *f* along with *y* (*T2*) and get *T3*. The entire then expression is a function that gets *x* (*T1*) and returns something of *T3* type, as mentioned above.
d. **False**. *f* gets one variable of type *T2*, but we try to pass it something of type *T1*.

2nd Question

1. a. Never
   b. String
   c. Any
   d. Number
   e. Never
   f. Boolean
2. [a] = is? boolean
   [b] = is? boolean
   [c] = (isBoolean z)
3. (union string (union boolean number))
   The "then" part of the "if" expression always returns string. The "alt" part can return boolean or number and the if can return both the "alt" and "then" parts because the function can get both number and boolean.