

Given the following type definitions:

```
:: IntList = Empty | ConsInt Int IntList
:: List a  = Nil   | Cons a (List a)
:: Tree a b = Leaf a | Node (Tree a b) b (Tree a b)
:: T1 a b   = C11 (a b) | C12 b
:: T2 a b c = C2 (a (T1 b c))
:: T3 a b c = C3 (a b c)
:: T4 a b c = C4 (a (b c))
```

What is the *kind* of the following types: IntList, List, List IntList, Tree, T1, T2, T3, and T4?

- 1) kind IntList: *
- 2) kind List: * -> *
- 3) kind Tree: * -> * -> *
- 4) kind T1: (* -> *) -> * -> *
- 5) kind T2: (* -> *) -> (* -> *) -> * -> *
- 6) kind T3: (* -> * -> *) -> * -> * -> *
- 7) kind T4: (* -> *) -> (* -> *) -> * -> *