1. **Which is a valid method of removing “Nothing” from a list of Maybe and also unbox whatever information is inside “Just” from the input list?**

R:

☑ c.
```
removeNothingAndUnbox list =
 let
  aux l acc =
   case l of
    [] -> acc
    x::xs -> case x of
               Nothing -> aux xs acc
               Just a -> aux xs (a::acc)
 in
  aux list []
```

2. List.reverse(List.map (\x -> 2*x) [0,1,3])

R: [6,2,0] : List

3. mul a b = if b == 0 then 0 else a + mul a b-1 atunci mul 3 2 = ?

R: RangeError: Maximum call stack size exceeded din cauza ca nu avem paranteza la b-1

4. Renaming imported modules

R: using the AS keyword

5. Select the types that are defined as sum types using valid Elm syntax

R: Int SI Float

6. What does the module expose? Module Date exposing (daysInMonth, Month(..), Date)

R:Month type and it’s variants SI daysInMonth function

7. Green -> <blank> Cu ce trebuie inlocuit blank?

R: Debug.todo”…” SI String

8. Cardinalitate Car

R: 9

9. List.all(\x -> x<30)(List.foldr(::)[][25,7,100])

R: False

10. In the definition of numberToMedal

R: Any integer besides 1,2,3

11. howBig n = if n < 10 then "Small" else if n < 100 then "Medium"

R: Compile error lipseste ramura else

12. Tipul recusivitatii

R:

Add a b = if b == 0 then a else add (a+1) (b-1) - TAIL

Add a b = if b == 0 then a else 1 + add a (b-1) - HEAD

Add a b s = if b == 0 then s + a else if a == 0 then s + b else add (a-1)(b-1)(s+2) - TAIL

(head daca ai apelare recursive + ceva)

13. Wrong option of using records in Elm

R: let Elm infer the structure of record

14. Match the function with their inferred signatures

R:

f1 a b = modBy b a + a + b Int -> Int -> Int

f12 a b c = a / b + c Float -> Float -> Float -> Float

f3 a b = “Result:” ++ a ++b String -> String -> String

15. Ce returneaza?

R:

foldl (^) 2 [1,3,2] = 8

foldr (^) 2 [1,3,2] = 1

drop 3 (map(\x -> head x) [[1],[2],[2,3],[]]) = Nothing

16. Select the true statements about records:

R:

Records can be pattern matched

Records are a collection of fields

17. filteredList = List.filter(\x -> x >= 10) [11,10,9,5,15,6,0]

R: [11,10,15]

18. Select the functions that can be rewritten in a point-free style:

R:

19. Which of these expressions will match a list containing exactly one element?

R: [x] SI x::[]

20. type alias Point = {x: Float, y:Float}. Select the functions that will compile

R:

addCoords : Point -> Float

addCoords p = p.x + p.y

SI

addCoords : Point -> Float -> Float -> Point

addCoords p x y = {x = p.x + x, y = p.y + y}