

Code Review 1 Questions

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Question 1

Draw an abstract syntax tree for $7 * (3 - 2)$.

Question 2

Draw an abstract syntax tree for $8 - (-3)$.

Question 3

What is the difference between abstract syntax trees and semantics?

Question 4

What is the type of the below expression?

```
let patriots_win_probability : ??? = 0. ;;
```

Question 5

What is the type of the below expression?

```
let exercise5b : ??? =  
  let greet y = "Hello " ^ y  
  in greet "World!" ;;
```

Question 6

What is the type of the below expression?

```
let best_house z : ??? =  
  if float_of_int z > 5. then "Mather" else "Mather" ;;
```

Question 7

What is the type of the below expression?

```
let mystery x y z : ??? =  
  if y then ( + ) x else z ;;
```

Question 8

What is the type of the below expression?

```
let rec mystery2 x : ??? =  
  match x with  
  | [] -> []  
  | h :: t -> if h +. 1. > 2. then mystery t else failwith "lame" ;;
```

Question 9

Implement a function that returns every odd element squared.

Question 10

Implement `max_list` from lab.