Question 6.3

The type rule specifies that all declared variables must have unique names. The Java algorithm illustrated polls through all variables and checks for two that possess the same name. I am not very familiar with the logic of the check function but it seems that it is reversed in the example. The logic states that if di.v is not equal to dj.v, the “duplicate” message is thrown. In any case, and assuming that I am interpreting the functionality of the check function incorrectly, all variables in the set appear to be compared correctly.

Question 6.4a

```
  =
 /  \
 f   i2f
   /   |
  -3   

float
```

```
  =
 /  \
 float   float
   /   |
 f   i2f
   /   |
  -3   int
```

Question 6.4g

```
  =
 /  \
 i   +
  /  |
 i   1
```
Question 6.4j

* = parentheses are type invalid – they’re syntactic sugar and possess no data type but help to limit the scope in what is being evaluated for the conditional and what is the result if the condition is true.

Question 6.8