1.

"Hello world"
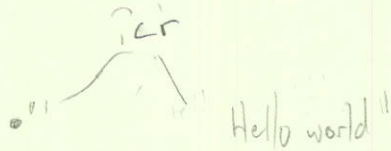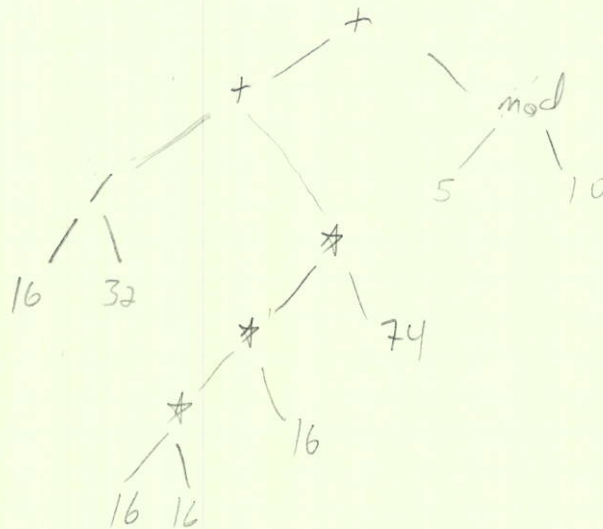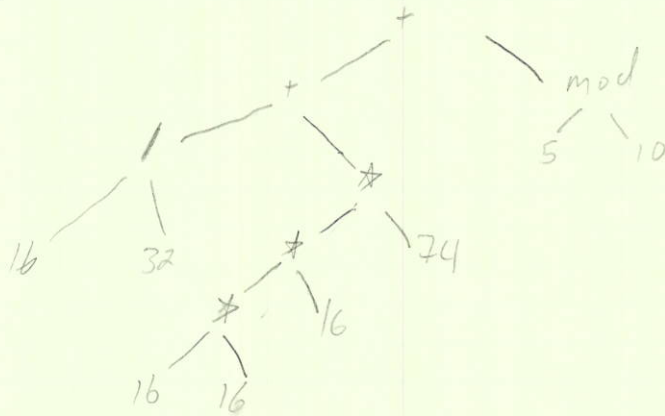
2. ?

3. Note: Assume "%" applies only to 5 and 10

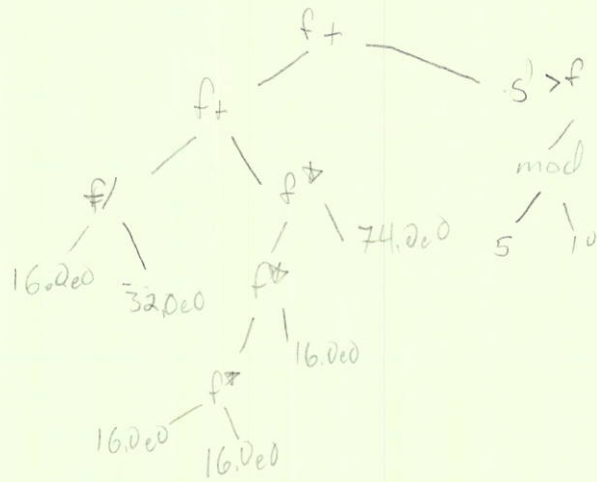16/32
+ 74 * 16
+ 5%10

4.

5.

f +
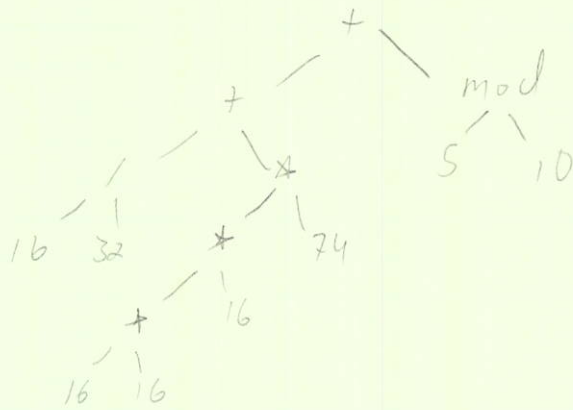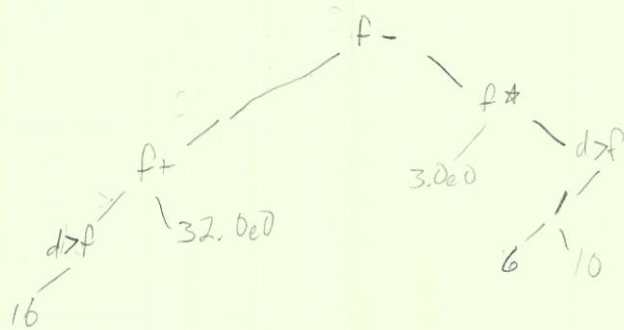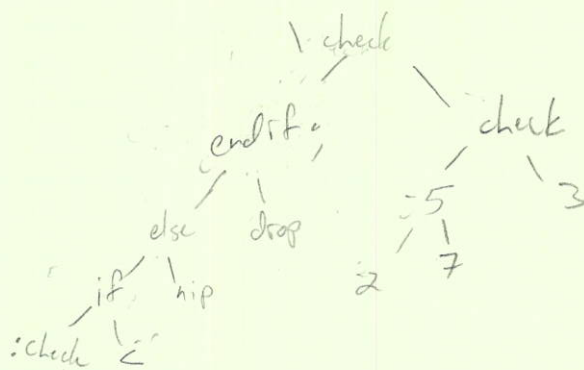f +   .5) >f
f/   f *   mod
16.0e0 -32.0e0   f *   74.0e0   5   10
16.0e0
f *
16.0e0
f *
16.0e0   16.0e0

6.

+
+   mod
+   *   5   10
16   32   *   74
+   16
16   16

7.

f -
f +   f *
d>f   32.0e0   3.0e0   d>f
16   6   10

8.

\ check
endif ;   check
else   drop   =5   3
if   hip   2   7
: check <

9.

```
              | check
            /      \
      endif;        check
     /     \        /    \
  else     drop    5      3
   /  \           / \
 if    nip       2   7
 / \
:check >
```

x create 0 , ;

10.

11.

```
        /  ;
       / \
 :convertint   d>f
```

12.

```
               ;
             /   \
        else      endif
        /  \      /  \
 recursive  \   drop  1
   /  |  \   \
  ;  fact    *
            / \
          +f   fact
          / \   / \
            \   \ / \
      dup 1  dup 1 .
```
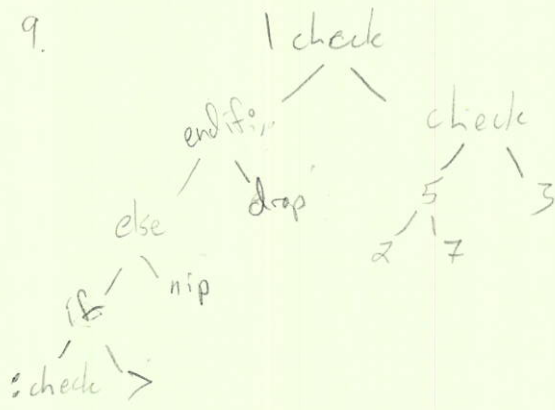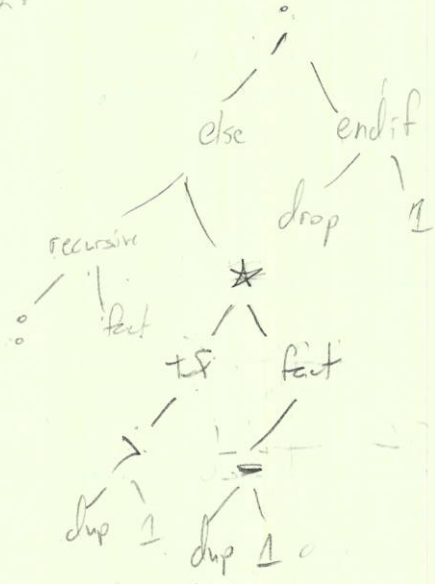
:fact recursive ,
    dup 1 > IF
        dup 1 - fac *
    else drop1
    endif ;

B. : fib recursive
    dup 2 u< if exit then
    1- dup fib swap -1 fib + ;

```
                              o
                             /
                    then            ++
                   /    \          /    \
            recursive    exit    fib     fib
              |    \      /  \    / \     / \
              o    fib  u<   if 1-  dup swap 1-
                        / \
                      dup  2
```