2. Assume that Tau is statically scoped, and we have the following Tau program. **main()** is the entry point into the program.

```
void main() {
   int x = 3;   int y = 2;   int z = 1;

   void f(int z){
       x--;
       y++;
       z = z + 10;
       g(z);
       print "f:", x+y+z;
   }

   void g(int x){
       x = x*2;
       print "g:", x+y+z ;
   }

   y = x + 10;
   f(y);
   print "main:", x+y+z;
}
```

"print" displays its parameters, and then a new line. What is the output of the program if Tau uses the

a) By-value parameter passing mechanism ? (6 pts)

g: 61
f: 39
main: 17

46 + 14 + 1
2 + 14 + 23
2 + 14 + 1

b) By-reference parameter passing mechanism ? (6 pts)

g: 97
f: 98
main: 51

48 + 48 + 1
2 + 48 + 48
2 + 48 + 1

c) By-value-result parameter passing mechanism ? (6 pts)

g: 61
f: 62
main: 49

46 + 14 + 1
2 + 14 + 46
2 + 46 + 1