

```

let
  f = proc (?x, ?y, ?z)
    if (x y) then *(z, 2)
    else z
in
  let
    g = proc (?m)
      if m then true
      else false
    k = 5
  in
    (f g true k)

```

1)  $t_p = (bool \rightarrow bool) * bool * int \rightarrow int$   
 $t_x = bool \rightarrow bool$   
 $t_y = bool$   
 $t_z = int$   
 $t_g = bool \rightarrow bool$   
 $t_m = bool$   
 $t_k = int$   
 $t_1 = int$

2)  $t_p = t_x * t_y * t_z \rightarrow t_1$   
 $t_g = t_m \rightarrow t_2$   
 $t_k = int$

3)  $t_p = t_g * bool * t_k \rightarrow t_1$   
 $t_p = t_g * bool * int \rightarrow t_1$   
 $t_x = t_g$

4)  $(x y)$   
 $t_x = t_y \rightarrow bool$   
 $t_x = bool \rightarrow bool$   
 $*(z, 2)$   
 $t_z * int \rightarrow int \quad z : int * int \rightarrow int$   
 $t_z = int$   
 $t_1 = int$

$t_p = (bool \rightarrow bool) * bool * int \rightarrow int$   
 $t_m = bool$   
 $t_z = bool$