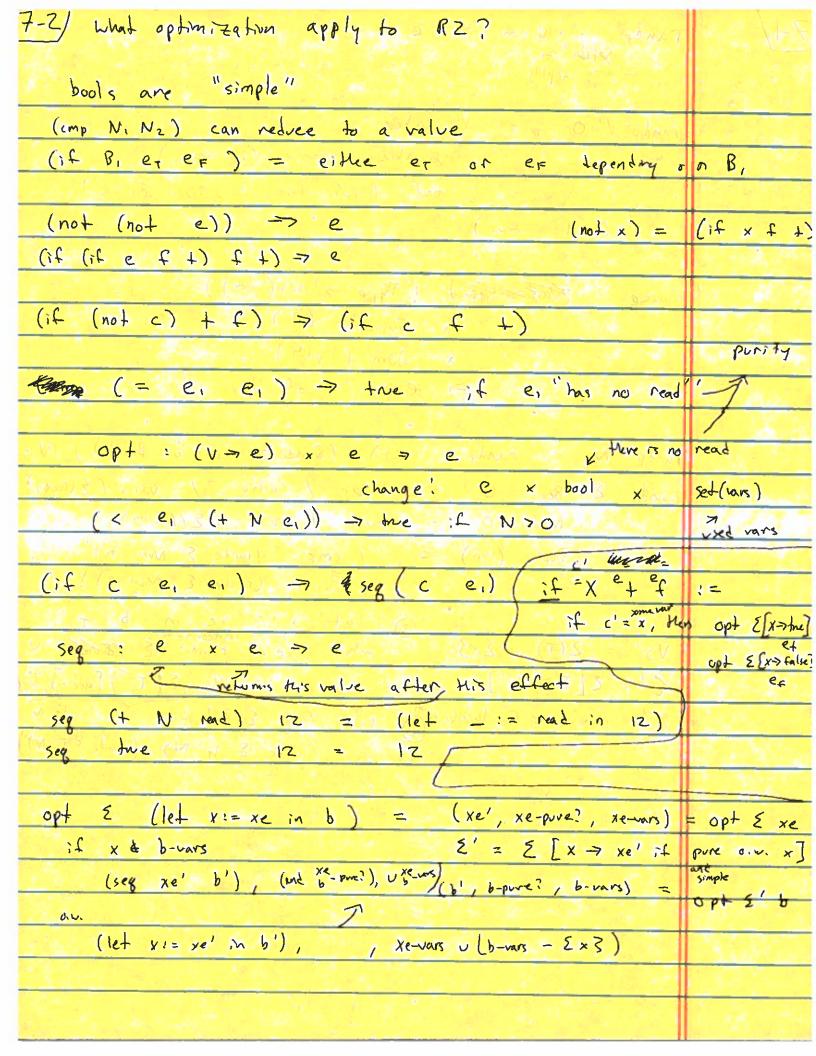
rando : xN um = 1 e of +11 Selfiard 7 randp VO = number variable-reference (if vary) bool (50%, the 1 50%, False) (+1 me) rande : (Type > set(vars)) × Type (T) × Num (depty)

> expression of type T randp N = rande (M+) (Random (Int or Boold)) N rande & Bool 0 = thee / false / vars (& (pool)) = num / vars / {(Num)) Num 0 = (cmp (rande & Num n)

Frandom (rande & Num n)) Bool (1+n) $VS' = \Sigma(T) \cup \Sigma X$ where $Xe := rance \Sigma REALTON N$ E'= E[T > VS'] b := ranke E(T) [add x], The E" = remove x from the other types (if (ranke & Bool N) (ranke & Ty N) (rande & Ty N))



```
Cit = arg != ... | one I false
      cmp := = 1 < 1 < 1 > 1>
      exp = .... | Inch arg | (comp arg arg)
        tail := .... | (goto label) | (goto-if (cmp a w)
                                          latel label)
interpe : (label => tail) tail
          L+T (goto label) = interpe L+T L+T(label)
Xo to X1
Xi := arg i= ... | byte-reg register (byte-reg rax)
         cc:= e | l | le | g | ge
                                           =7 % al
         instri= in | xorg a, a | cmpg a,a |
                    | set cc a | mov zbg a, a | imp-if relable
                      no space in printing
                                            prits impro label
 remeber compgy $4,$5 5<4
          set e good => FalsE
both compg and mov zbg cannot have nome in 2nd position
reo updated for Rz
10-e := ... (if (cmp 10-a 10-a) 10-e 10-e)
rco-c := .... | (not rco-a) (cmp rco-a rco-a) |
               (if (cmp rco-a rcoa) rco-e rco-e)
10-a != .... | bools (+ ff)
```

(0 o (if ec e+ e+) 1= (NVc , ac) = no o ec & las (nv+, a+) = no o et (nvc ++ nv+ ++ nve ++ (x, if (nut, at) 1= no o et if (imp al ar)