7. Euclidian Algorithm

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comment  Every pair of numbers a, b not both zero have a positive greatest common divisor: gcd;

procedure  EUC (a, b) := (gcd)

begin
EUC:
if  (a = 0)
  begin  gcd := b ; return end
if  (b = 0)
  begin  gcd := a ; return end
r2 := a
r1 := b
here:  g := r2/r1
comment  Assumption is made that truncation takes place in the above statement;
r := r2 - r1 × g
if  (r = 0)
  begin  gcd := r1 ; return end
begin  r2 := r1
  begin  r1 := r
  go to here end

integer  (e)
end