Algorithm Test Algorithm ▶ The g.c.d. of a and b 1: **procedure** Euclid(a, b) $r \leftarrow a \bmod b$ 2: while $r \neq 0$ do \triangleright We have the answer if r is 0 3: $a \leftarrow b$ 4: $b \leftarrow r$ 5: $r \leftarrow a \bmod b$ 6: end while 7: $\mathbf{return}\ b$ \triangleright The gcd is b 8: This line will not have a number! 9: end procedure