

# 1 Section

Euclid's algorithm

- Step 1 If  $m \nmid n$ , exchange  $m$  and  $n$ .
- Step 2 Divide  $m$  by  $n$  and get the remainder,  $r$ . If  $r=0$ , report  $n$  as GCD of  $m$  and  $n$ .
- Step 3 Replace  $m$  by  $n$  and replace  $n$  by  $r$ . Repeat Step 2.