

PART TWO
Euclid's Algorithm

1) GCD of $(42, 56)$

$$\begin{array}{r|rr} 56 & 42 & 1 & 14 \\ 42 & 14 & 3 & 0 \end{array}$$

$$\text{GCD} = 14$$

2) Show 35 & 19 are relatively prime.

$$\begin{array}{r} 19 \overline{) 35} \quad 1 \\ \underline{19} \\ 16 \end{array}$$

$$\cancel{35} = 19 \Rightarrow 35 = 19 \times 1 + 16$$

$$19 = 16 \times 1 + 3$$

$$16 = 3 \times 5 + 1$$

Thus \wedge HCF of 35, 19 is 1 no less
proves that they are prime.