(5) i)
$$360=2^3$$
, 3^2 . 5 $=7 \mod (360, 294)=2.3=6$
 $294=2.3.7^2$

ii)
$$360 = 794.1 + 66$$

 $294 = 66.4 + 30$
 $66 = 30.2 + 6$
 $30 = 6.5 + 0$
 $mcd(360, 794) = 6$