

prime no: 1 and no: itself

$$2, 3, \cancel{4}, \cancel{5}, \cancel{6}, 7 \rightarrow 2, 3, 5, 7, 11, 13, \dots$$

$$= \textcircled{1} \Rightarrow \text{coprime no:}$$

1) prime factors (HCF $\rightarrow$ Highest Common Factor)

1) Find the HCF (Highest Common Factor) of 28 and 105

sol:

$$\begin{array}{r|l} 2 & 28 \\ \hline 2 & 14 \\ \hline 7 & 7 \\ \hline & 1 \end{array}$$

$$28 = 2 \times 2 \times \textcircled{7}$$

$$105 = 3 \times 5 \times \textcircled{7}$$

$$\begin{array}{r|l} 3 & 105 \\ \hline 5 & 35 \\ \hline 7 & 7 \\ \hline & 1 \end{array}$$

$$\boxed{\text{HCF} = 7}$$

$$2) \underline{A} = 3^2 \times 5^4 \times 7 \quad \underline{B} = 3^4 \times 5^3 \times 7 \times 11$$

2) Find the HCF (Highest Common Factor) of A and B.

$$\underline{\text{sol}} \Rightarrow A = 3^2 \times 5^4 \times 7$$

$$B = 3^4 \times 5^3 \times 7 \times 11$$

$$\text{HCF} = 3^2 \times 5^3 \times 7$$

$$= 7875$$

$$B = \textcircled{3^2} \times 3^2 \times \textcircled{5^3} \times \textcircled{7} \times 11$$

$$A = \textcircled{3^2} \times \textcircled{5^3} \times 5 \times \textcircled{7}$$

$$\boxed{\text{HCF} = 7875} \text{ Ans.}$$

b)