

$$= 1439 + 1 = 1440$$

REVISION EXERCISE

1	108	288	420
2	54	144	210
3	36	72	105
4	27	36	35
5	18	18	7
6	12	9	
7	9	3	
8	6	3	
9	3	3	

$108 = 2 \times 2 \times 3 \times 3 \times 3$
 $288 = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3$
 $420 = 2 \times 2 \times 3 \times 5 \times 7$

HCF of 108, 288 & 420 is 2×2

$$= 12$$

2 36, 54, 138

2	36	54	138
2	18	27	69
3	6	9	23
3	2	3	7

$$\begin{array}{r} 24 \overline{) 30} \\ \underline{-24} \\ 6 \end{array}$$

$$\begin{array}{r} 24 \overline{) 30} \\ \underline{-24} \\ 6 \end{array}$$

$$\begin{array}{r} 6 \overline{) 24} \\ \underline{-24} \\ 0 \end{array}$$

$$\begin{array}{r} 6 \overline{) 36} \\ \underline{-36} \\ 0 \end{array}$$

HCF of 36, 54, 108 = 6

2. ~~72, 80, 252~~

$$\begin{array}{l} 2 \overline{) 72, 80, 252} \\ 2 \overline{) 36, 40, 126} \\ 2 \overline{) 18, 20, 63} \\ 2 \overline{) 9, 10, 63} \\ 3 \overline{) 9, 5, 63} \\ 3 \overline{) 3, 5, 21} \\ 1, 5, 7 \end{array}$$

LCM of $2 \times 2 \times 2 \times 2 \times 3 \times 3, 1 \times 5 \times 7$
= 5040

Rough

$$\begin{array}{r} 720 \\ \times 7 \\ \hline 5040 \end{array}$$

$$\begin{array}{r} 720 \\ \times 7 \\ \hline 5040 \end{array}$$

ii) \emptyset $2 \mid 8, 66, 120$
 $2 \mid 29, 33, 60$
 $2 \mid 12, 33, 30$
 $2 \mid 6, 33, 15$
 $3 \mid 3, 33, 15$
 $1, 11, 5$

LCM of 8, 66, 120 $\rightarrow 2 \times 2 \times 2 \times 2$
 $\times 3 \times 11 \times 5 = 2640$

~~T & F~~

3. i) \emptyset T

ii) \emptyset ~~F~~

iii) B. T

iv) G. T

4. ~~LCM~~ LCM = 36

~~Product of two numbers~~

~~HCF = 36~~

~~Product of two numbers =~~

~~Product of their HCF & LCM = 7254~~

~~The LCM is 334~~

$$\begin{array}{r}
 7254 \\
 - 1362780 \\
 \hline
 439396
 \end{array}$$

$$\begin{array}{r}
 336 \\
 36 \overline{) 12096} \\
 - 1080 \\
 \hline
 1296
 \end{array}$$

4) Product of two numbers = 1296
 = Product of their HCF & LCM = 108
 = 12096 = 36 x LCM

$$\begin{array}{r}
 LCM = 12096 \\
 \hline
 36
 \end{array}$$

∴ = 336

5) Product of two numbers
 = Product of their HCF & LCM

$$48 \times 24 = 1152$$

Second number = $48 \div 1152$

∴ = 24

$$\begin{array}{r}
 24 \\
 48 \overline{) 1152} \\
 - 96 \\
 \hline
 192 \\
 - 192 \\
 \hline
 0
 \end{array}$$

~~7 | 35, 21~~
~~5 | 35, 7~~
 5, 3

LCM of 140, 168 = $2 \times 2 \times 2 \times 3 \times 7 \times 5$
 ~~$5 \times 3 \times 7$~~

(7) 2 | 140, 168
 2 | 70, 84
 2 | 35, 42
 3 | 35, 21
 7 | 35, 7
 5, 7

840
 x 7
 ———
 0

LCM of $2 \times 2 \times 2 \times 3 \times 7 \times 5$
 = 840

Product of two numbers = Product of their HCF & LCM

~~140~~ HCF = $\frac{\text{1st number} \times \text{2nd number}}{\text{LCM}}$

HCF = 7

LCM 140 | 168
 -140
 ———
 20

$$\begin{array}{r}
 2 \overline{) 108} \quad 2 \overline{) 150} \\
 \underline{20} \\
 88 \\
 \underline{80} \\
 80 \\
 \underline{80} \\
 0 \\
 \hline
 2 \overline{) 34} \quad 3 \overline{) 25} \\
 \underline{20} \\
 14 \\
 \underline{12} \\
 2 \\
 \underline{0} \\
 0 \\
 \hline
 3 \overline{) 27} \quad 5 \overline{) 25} \\
 \underline{30} \\
 27 \\
 \underline{24} \\
 3 \\
 \underline{0} \\
 0 \\
 \hline
 3 \overline{) 9} \quad 5 \\
 \underline{30} \\
 9 \\
 \underline{0} \\
 0 \\
 \hline
 \end{array}$$

LCM = 21520

HCF of 108 and 150 = ~~2 x 3 x 3~~ = 18

LCM = ~~2 x 2 x 3 x 3 x 5~~ = 180

Product of two numbers = Product of HCF & LCM

LCM = 108 - 1st number x 2nd number

HCF =

LCM = 2,700

HCF =

LCM = 2,700

HCF =

$$\begin{array}{r}
 2 \overline{) 228,42} \\
 \underline{200,00} \\
 28,42 \\
 \underline{21,00} \\
 7,42 \\
 \underline{7,00} \\
 42 \\
 \underline{42} \\
 0 \\
 \hline
 \end{array}$$

LCM of 208 & 221 = 84