

Revisio Ex

$$\begin{array}{r}
 1) 108 \overline{) 288} \begin{array}{l} (2 \\ - 216 \\ \hline 072 \end{array} \overline{) 108} \begin{array}{l} (1 \\ - 72 \\ \hline 36 \end{array} \overline{) 72} \begin{array}{l} (2 \\ - 72 \\ \hline 0 \end{array}
 \end{array}$$

$$\begin{array}{r}
 108 \overline{) 420} \begin{array}{l} (3 \\ - 324 \\ \hline 96 \end{array} \overline{) 108} \begin{array}{l} (1 \\ - 96 \\ \hline 12 \end{array} \overline{) 96} \begin{array}{l} (8 \\ - 96 \\ \hline 0 \end{array}
 \end{array}$$

H.C.F of 108, 288 = 36
 H.C.F of 108, 420 = 12
 H.C.F of 108, 288, 420 = 12

$$\begin{array}{r}
 1) 36 \overline{) 54} \begin{array}{l} (1 \\ - 36 \\ \hline 18 \end{array} \overline{) 36} \begin{array}{l} (2 \\ - 36 \\ \hline 0 \end{array}
 \end{array}$$

$$\begin{array}{r}
 36 \overline{) 138} \begin{array}{l} (3 \\ - 108 \\ \hline 30 \end{array} \overline{) 36} \begin{array}{l} (1 \\ - 30 \\ \hline 6 \end{array} \overline{) 30} \begin{array}{l} (5 \\ - 30 \\ \hline 0 \end{array}
 \end{array}$$

H.C.F of 36, 54 = 18
 H.C.F of 36, 138 = 6
 H.C.F of 36, 54, 138 = 6

$$\begin{array}{r}
 2) \begin{array}{l} 2 \overline{) 72, 80, 252} \\ 2 \overline{) 36, 40, 126} \\ 3 \overline{) 18, 20, 63} \\ 3 \overline{) 9, 20, 31} \\ 2 \overline{) 3, 20, 31} \\ 2 \overline{) 3, 10, 31} \\ 3, 5, 31 \end{array}
 \end{array}$$

$$\begin{aligned}
 \text{L.C.M} &= 2 \times 2 \times 3 \times 3 \times 2 \times 5 \\
 &\times 3 \times 5 \times 31 \\
 &= 5040
 \end{aligned}$$

$$\begin{array}{r}
 8 \mid 48, 66, 100 \\
 2 \mid 16, 22, 40 \\
 2 \mid 8, 11, 20 \\
 2 \mid 4, 11, 10 \\
 2 \mid 11, 5
 \end{array}$$

$$\begin{aligned}
 \text{LCM} &= 2 \times 2 \times 2 \times 2 \times 5 \times 11 \\
 &= 2640
 \end{aligned}$$

- 3) i) True
- ii) True
- iii) True
- iv) True

4) Product of 2 nos = 12096
 H.C.F = 36
 LCM = $36 \div 12096$
 = 336

~~Product of 2 nos = 12096~~
~~H.C.F = 36~~
~~LCM = 36 \div 12096~~

$$\begin{array}{r}
 36 \overline{) 12096} \quad (336) \\
 \underline{108} \\
 129 \\
 \underline{108} \\
 216 \\
 \underline{216} \\
 0
 \end{array}$$

5) Product of HCF LCM = 1152
 Product of Both nos = 1152
 One of the numbers = 48
 2nd no = $1152 \div 48 = 24$

6) $28 = 1, 2, 4, 7, 14, 28$
 $42 = 1, 2, 3, 6, 7, 14, 21$
 $HCF = 14$

ii)
$$\begin{array}{r|l} 2 & 28, 42 \\ 3 & 14, 21 \\ 7 & 14, 7 \\ & 2, 1 \end{array}$$
 $LCM = 2 \times 3 \times 7 \times 1 \times 1 = 42$

7) ~~140~~
$$\begin{array}{r|l} 2 & 140, 168 \\ 2 & 70, 84 \\ 5 & 35, 42 \\ 7 & 7, 42 \\ 2 & 1, 6 \\ & 1, 3 \end{array}$$
 $L.C.M = 2 \times 2 \times 5 \times 7 \times 1 \times 1 \times 1 \times 1 = 140 \times 168$

$H.C.F = \frac{140 \times 168}{140 \times 168} = \frac{23520}{2100} = 11.2$

8) ~~108~~
$$\begin{array}{r} 108 \overline{) 4504} \\ \underline{-432} \\ 18108 \\ \underline{-108} \\ 0 \end{array}$$

 $H.C.F = 3$

$LCM = 450 \times 108 = 18$
 $= 4860 = 18$
 $= 2700$