C.W
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Revision Exercise Ch-8
Previous knowledge

(i) TRUE:- Because the prime numbers ha
no common factor except 1.

(ii) TRUE:- Because co-prime number have no comm
factor expect 1.

(iii) TRUE:- Because the prime number ha
no common factor except 1.

(iv) TRUE:- Because co-prime number have
common factor except 1.

Evaluation Question

Q.2. Find the L.C.M. of 72, 80 and 252

Ans:- In division method,

2	72, 80, 252
2	36, 40, 126
2	18, 20, 63
3	9, 10, 63
3	3, 10, 21
	1, 10, 7

LCM = 2×2×2×3×10×7 = 5040

(ii) LCM of 48, 66 and 120

2	48, 66, 120
2	24, 33, 60
2	12, 33, 30
3	6, 33, 15
	2, 11, 5

LCM = 2×2×2×3×2×11×5 = 2640

7 i)

ii) ~~H.C.F of two prime numb~~ 36, 54, and 138

```
        1
36 | 54
   -36
   ---
   18 | 36
      -36
      ---
        0
```

```
        7
18 | 138
   -126
   ----
    12 | 18
       -12
       ---
        6 | 12
          -12
          ---
           0
```

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

(4) Product of the two numbers is 120

A:> We know that

Product of two numbers = product of their H.C.F and L.C.M

$12096 = 36 \times L.C.M$

$\Rightarrow LCM = 12096 / 36 = 336$

(5) Product of H.C.F and L.C.M = 452

One no. = 48

other = ?

$\Rightarrow$ Product of the numbers = Product of their H.C.F and L.C.M.

$\Rightarrow$ 1st number x 2nd number = Product of their H.C.F and L.C.M.

$\Rightarrow 48 \times$ 2nd number $= 1152$

$\Rightarrow$ 2nd number $= 1152 / 48 = 24$

6.

i) Find the Small

A:) We know that the least number of the number which is divisible by 28 and 42 is their L.C.M.

L.C.M. of 28 and 42 = $2 \times 2 \times 3 \times 7 = 84$

ii) We know that the biggest number which can be divide 28 and 42 completely will be their H.C.F.

H.C.F. of 28 and 42 = 14.

7.

A:) Numbers are 140 and 168

L.C.M. of 140 and 168

2	140, 168
2	70, 84
7	35, 42
	5, 6

$= 2 \times 2 \times 7 \times 5 \times 6 = 840$

$$H.C.F. = \frac{1st\ number \times 2nd\ number}{L.C.M.}$$

$$HCF = \frac{140 \times 168}{840} = 28$$

8.

A:- Numbers are given : 108 and 450
H.C.F. of 108 and 450 = 18

$$\begin{array}{r|l} 108 & 450 \\ -432 & 4 \\ \hline 18 & 108 \\ & -108 \\ \hline & 0 \end{array} \quad \begin{array}{r|l} 18 & 108 \\ -108 & 6 \\ \hline & 0 \end{array}$$

$\therefore$ L.C.M = $\frac{\text{1st no.} \times \text{2nd no.}}{\text{H.C.F.}}$

$= \frac{108 \times 450}{18} = 2700$

1) Find H.C.F.

(i) ~~108~~, 288, 420

$$\begin{array}{r|l} 108 & 288 \\ -216 & 2 \\ \hline 72 & 108 \\ -72 & 1 \\ \hline 36 & 72 \\ -72 & 2 \\ \hline 0 & \end{array} \quad \begin{array}{r|l} 36 & 420 \\ -396 & 11 \\ \hline 24 & 36 \\ -24 & 1 \\ \hline 12 & 24 \\ -24 & 2 \\ \hline 0 & \end{array}$$

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