

Class:- V

Math

Ch: 7

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Practice Time:- 7.4

Q. Find the HCF of the following numbers by continuous division method:

1) 420, 504

$$\begin{array}{r} \text{Solu.} \quad 420 \overline{) 504} \quad (1) \\ \underline{-420} \\ 84 \overline{) 420} \quad (5) \\ \underline{-420} \\ 0 \end{array}$$

Here the last divisor is 84
Hence, the HCF of 420 and 504 is 84

Practice Time:- 7.5 (LCM)

(least) Lowest Common Multiple

Q. Find the LCM of the following pairs of numbers by listing their multiples:

1) 5, 8

Solu. Multiple of 5 = 5, 10, 15, 20, 25, 30, 35, 40, 45, ...

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Multiple of 8 = 8, 16, 24, 32, 40, 48, ...

LCM 5 and 8 is 40.

Q. Find the LCM of the following numbers by prime factorizations:

1) 24, 30

$$\begin{array}{r|l} \text{Solu.} & 2 \overline{) 24} \\ \hline & 2 \overline{) 12} \\ \hline & 2 \overline{) 6} \\ \hline & 3 \end{array} \qquad \begin{array}{r|l} & 2 \overline{) 30} \\ \hline & 3 \overline{) 15} \\ \hline & 5 \end{array}$$

$$24 = 2 \times 2 \times 2 \times 3$$

$$30 = 2 \times 3 \times 5$$

$$\text{LCM} = 2 \times 3 \times 2 \times 2 \times 5 = 120$$

2) 54, 72, 90

$$\begin{array}{r|l} \text{Solu.} & 2 \overline{) 54} \\ \hline & 3 \overline{) 27} \\ \hline & 3 \overline{) 9} \\ \hline & 3 \end{array} \qquad \begin{array}{r|l} & 2 \overline{) 72} \\ \hline & 2 \overline{) 36} \\ \hline & 2 \overline{) 18} \\ \hline & 3 \overline{) 9} \\ \hline & 3 \end{array} \qquad \begin{array}{r|l} & 2 \overline{) 90} \\ \hline & 3 \overline{) 45} \\ \hline & 3 \overline{) 15} \\ \hline & 5 \end{array}$$

$$54 = 2 \times 3 \times 3 \times 3$$

$$72 = 2 \times 2 \times 2 \times 3 \times 3$$

$$90 = 2 \times 3 \times 3 \times 5$$

$$\text{LCM} = 2 \times 3 \times 3 \times 3 \times 2 \times 2 \times 5 = 1080$$