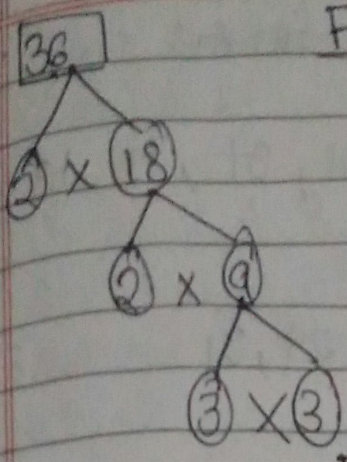


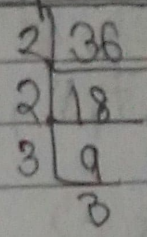
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21/07/21

# Ch-8 - HCF & LCM

## Factor Tree



## Repeated Division



Ex-8'A)

### Evaluation Question

1) Write all the factors of:

i)  $15 = 1, 3, 5, 15$

ii)  $55 = 1, 5, 11, 55$

iii)  $48 = 1, 2, 3, 4, 6, 8, 12, 16, 24, 48$

iv)  $36 = 1, 2, 3, 4, 6, 9, 12, 18, 36$

v)  $84 = 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42$  and  $84$

2) Write all prime numbers:

i) less than 25

ans)  $2, 3, 5, 7, 11, 13, 17, 19, 23$

ii) between 15 and 35

ans)  $17, 19, 23, 29, 31$

iii) between 8 and 76

ans)  $11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73$

3) Write the prime numbers from:

i) 5 to 45

ans) 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43

ii) 2 to 32

ans) 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31

iii) 8 to 48

ans) 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47

iv) 9 to 59

ans) 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59

4) Write the prime factors of:

i) 16 =

ans)  $\begin{array}{r} 2 \overline{) 16} \\ \underline{2} \phantom{0} \\ 2 \phantom{0} \\ \underline{2} \phantom{0} \\ 2 \phantom{0} \\ \underline{2} \phantom{0} \\ 0 \end{array}$

ans) 2

ii) 27

ans)  $\begin{array}{r} 3 \overline{) 27} \\ \underline{3} \phantom{0} \\ 3 \phantom{0} \\ \underline{3} \phantom{0} \\ 0 \end{array}$

ans) 3

iii) 35

ans)  $\begin{array}{r} 5 \overline{) 35} \\ \underline{5} \phantom{0} \\ 0 \end{array}$  ans) 5, 7

iv) 49

ans)  $\begin{array}{r} 7 \overline{) 49} \\ \underline{7} \phantom{0} \\ 0 \end{array}$  ans) 7

5) If P<sub>n</sub> means prime factors of n, find:

i) P<sub>6</sub>    ii) P<sub>24</sub>    iii) P<sub>50</sub>    iv) P<sub>42</sub>

ans) Prime factors of 6 are 2 and 3.

$\begin{array}{r} 2 \overline{) 6} \\ \underline{2} \phantom{0} \\ 0 \end{array}$   
 $\begin{array}{r} 3 \overline{) 3} \\ \underline{3} \\ 0 \end{array}$

i) Prime factors of 24 are 2 and 3.

$\begin{array}{r} 2 \overline{) 24} \\ \underline{2} \phantom{0} \\ 2 \phantom{0} \\ \underline{2} \phantom{0} \\ 0 \end{array}$   
 $\begin{array}{r} 2 \overline{) 12} \\ \underline{2} \phantom{0} \\ 0 \end{array}$

ii) Prime factors of 50 are 2 and 5.

$\begin{array}{r} 2 \overline{) 50} \\ \underline{2} \phantom{0} \\ 0 \end{array}$   
 $\begin{array}{r} 5 \overline{) 25} \\ \underline{5} \phantom{0} \\ 0 \end{array}$

iii) Prime factors of 42 are 2, 3 and 7.

$\begin{array}{r} 2 \overline{) 42} \\ \underline{2} \phantom{0} \\ 0 \end{array}$   
 $\begin{array}{r} 3 \overline{) 21} \\ \underline{3} \phantom{0} \\ 0 \end{array}$   
 $\begin{array}{r} 7 \overline{) 7} \\ \underline{7} \\ 0 \end{array}$