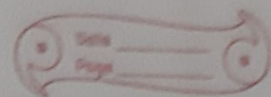


H.C.F AND L.C.M



Exercise-8(A)

Evaluation Question

1- Write all the factors of:

- (i) 15: The factors of 15 are 1, 3, 5 and 15
 (ii) 55: The factors of 55 are 1, 5, 11 and 55
 (iii) 48: The factors of 48 are 1, 2, 3, 4, 6, 8, 12, 16, 24 and 48.
 (iv) 36: The factors of 36 are 1, 2, 3, 4, 6, 9, 12, 18 and 36
 (v) 84: The factors of 84 are 1, 2, 3, 4, 5, 6, 7, 12, 14, 21, 28, 42 and 84.

2- Write all prime numbers:

- (i) less than 25: 2, 3, 5, 7, 11, 13, 17, 19 and 23 are all prime numbers less than 25.
 (ii) between 15 and 35: 17, 19, 23, 29 and 31
 (iii) between 8 and 76: 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71 and 73.

3- Write the prime numbers from.

- (i) 5 to 45: 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71
 (ii) 2 to 32: 2, 3, 5, 11, 13, 17, 19, 23, 29, 31
 (iii) 8 to 48: 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47
 (iv) 9 to 59: 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, ~~61, 67~~

4- Write the prime factors of:

- (i) 16:
$$\begin{array}{r|l} 2 & 16 \\ \hline 2 & 8 \\ \hline 2 & 4 \\ \hline & 2 \end{array}$$
 \therefore , the prime factors of 16 is 2

- (ii) 27:
$$\begin{array}{r|l} 3 & 27 \\ \hline & 9 \\ \hline & 3 \\ \hline & 1 \end{array}$$
 \therefore , the prime factors of 27 is 3

(iii) $35: \begin{array}{r} 5 \overline{) 35} \\ 7 \end{array}$ \therefore , the prime factors of 35 are

(iv) $49: \begin{array}{r} 7 \overline{) 49} \\ 7 \end{array}$ \therefore , 7 is the prime factor of 49.

5- IF P_n means prime factors of n , find:

(i) $P_6: \begin{array}{r} 2 \overline{) 6} \\ 3 \end{array}$ Prime factors of 6 are 2 and 3

(ii) $P_{24}: \begin{array}{r} 2 \overline{) 24} \\ 2 \overline{) 12} \\ 2 \overline{) 6} \\ 2 \end{array} \quad \begin{array}{r} 2 \overline{) 24} \\ 2 \overline{) 12} \\ 3 \overline{) 6} \\ 3 \end{array}$ 2 and 3 are the prime factors of 24

(iii) $P_{50}: \begin{array}{r} 2 \overline{) 50} \\ 5 \overline{) 25} \\ 5 \end{array}$ Prime factors of 50 are 2 and 5

(iv) $P_{42}: \begin{array}{r} 2 \overline{) 42} \\ 3 \overline{) 21} \\ 7 \end{array}$ Prime factors of 42 are 2, 3 and 7