

CLASS-VI(MATHS)

PLAYING WITH NUMBERS (CHAPTER-4)

General direction for the students: whatever be the questions solved , everything must be copied in the maths copy and then do the Home work in the same copy.

Q.1. Prime factorisation:- If a natural number is expressed as the product of prime numbers , then the factorisation of the number is called its prime factorisation.

Example:- $6 = 2 \times 3$.

Q.2. Highest common factor(H.C.F):- HCF of two natural numbers is the largest common factor or divisor of the given numbers.

Example:- consider the numbers 10 and 14.

The factors of 10 are 1, 2, 5, 10.

The factors of 14 are 1, 2, 7, 14. The common factors of 10 and 14 are 1 and 2. The greatest number from the common factor is 2.

Hence the HCF is 2.

Q.3. Find the HCF of 36 and 150.

Ans:-

$$\begin{array}{r} 36) 150 \quad (4 \\ \underline{-144} \\ 6) 36 \quad (6 \\ \underline{-36} \\ 0 \end{array}$$

Thus the HCF of 36 and 150 is 6.

Q.4. Write all the prime factors Of 1729 and arrange them in ascending order. State the relation , if any , between two consecutive prime numbers.

ANS:- We find the prime factorisation of 1729 by division method.

By calculating we are getting $1729 = 7 \times 13 \times 17$.

Prime factors of 1729 in ascending order are 7 , 13 , 17.

Note that the difference between two consecutive prime factors is 6.

HOME WORK:- EXERCISE (4.3) QUESTION NUMBER (4) and (5) EXERCISE (4.4) QUESTION NUMBER 1, 2, 3.