Worksheet : 3

| **Chapter 3: Playing with numbers** | **Subject: Mathematics** **Class: VI** |

A. Choose the correct option.
1) Which of the following numbers has 9 as a factor?
    a) 90808   b)88488   c)903099   d)654321
2) Which of the following numbers does not have 8 as a factor?
    a) 52424   b)99000   c)600008   d)63250
3) The LCM of two coprime numbers is their _.
    a) sum   b)difference   c)product   d)quotient
4) How many composite numbers are between a pair of twin primes?
    a) 1   b)2   c)0   d)3
5) The HCF of two consecutive even numbers is_.
     a) 1   b)2   c)0   d)3

B. State true or false.
1) Sum of any two even numbers is even.
2) Sum of any two odd numbers is even.
3) Product of three odd numbers is odd.
4) Prime numbers do not have any factors.
5) All even numbers are composite numbers.
6) Sum of two prime numbers is always even.
7) Product of two even numbers is always even.
8) Product of two primes cannot be a prime.

C. Match the numbers with their prime factorisation.

1)180	(i)	$2 \times 2 \times 3 \times 5 \times 5$
2)270	(ii)	$2 \times 2 \times 3 \times 3 \times 5$
3)120	(iii)	$2 \times 3 \times 3 \times 5 \times 5$
4)300	(iv)	$2 \times 2 \times 2 \times 3 \times 5$
5)450	(v)	$2 \times 3 \times 5 \times 5 \times 5$
6)750	(vi)	$2 \times 3 \times 3 \times 3 \times 5$

D.   Answer the questions

1. Find the largest 5-digit number that is exactly divisible by 18 and 48.

2. Find the largest number that divides 848 and 1018 and leaves remainders 8 and 10 respectively.

3. Find (a) 5 consecutive numbers less than 50 such that there is no prime number between them?

(b) 7 consecutive numbers between 50 and 100 such that there is no prime number between them?

4. Find the HCF of 28,126 and 133 by the long division method.

5. At an amusement park, three rides start simultaneously:a Ferris wheel rotates every 20 minutes, a roller coaster departs every 15 minutes, and a carousel begins every 25 minutes. If they all commence operations together at 11:15 a.m., determine the time when they will all start again simultaneously.