INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2023-24

CLASS:X SUBJECT: MATHEMATICS DATE: 09-04-2023

LESSON:01 - REAL NUMBERS

1.	Find the LCM of smallest two-digit composite number and smallest
	composite number? (Ans: 20)
2.	If $HCF(a,b) = 12$ and $a \times b = 1500$, Find $LCM(a,b)$ (125)
3.	If a & b are two positive co-prime integers such that $a = 12$ b, then
	HCF(a,12) = (Ans: 12)
4.	If $2^3 \times 3^a \times b \times 7$ is the prime factorization of 2520. Then $5a + 2b =$
	(Ans: 20)
5.	The LCM of two numbers is 9 times their HCF. The sum of LCM and HCF
	is 500.Find HCF of the two numbers (Ans:50)
6.	If the product of two co-prime numbers is 217, Find their LCM (Ans: 217)
7.	The ratio between the HCF and LCM of 5,15,20 is (Ans: 1:2)
8.	Given that $\sqrt{3}$ is an irrational, prove that $5-2\sqrt{3}$ is an irrational number
9.	Find the LCM of 96 and 360 by using fundamental theorem of arithmetic.
	(Ans: 1440)
10. Find the LCM and HCF of the following pairs of integers and verify that	
	$LCM \times HCF = Product of integers:$
	a) 510& 92 b) 26 & 91
	(Ans: a) LCM-23460, HCF- 2 & b)LCM-182, HCF-13)
11. Write the smallest number which is divisible by both 306 and 657	
	(Ans: 22338)

- 12. Given that $\sqrt{2}$ is irrational, prove that $(3 + 3\sqrt{2})$ is an irrational number. 13. Find the LCM of numbers whose prime factorization are expressible as 3×5^2 and $3^2 \times 7^2$. (Ans: 11025)
- 14.If two positive integers x & y are expressible in terms of primes as $x = p^2q^3$ and $y = p^3q$, what can you say about their LCM and HCF. Is LCM a multiple of HCF? Explain?
- 15. Three bells toll at intervals of 9,12,15 minutes respectively. If they start tolling together after, what time will they next together (Ans: 180 minute)
