



INDIAN SCHOOL AL WADI AL KABIR

Class X - Mathematics (2026-27)

Worksheet – Real Numbers

19-04-2026

Questions of 1 mark each (MCQ)

Q.1.	Which of the following is a rational number between $\sqrt{3}$ and $\sqrt{5}$?							
	A	1.414238795401 ...	B	$2.32\bar{6}$	C	π	D	1.857142
Q.2.	If two positive integers a and b are written as $a = x^3y^2$ and $b = xy^3$; x, y are prime numbers, then HCF (a, b) is							
	A	xy	B	xy^2	C	x^3y^3	D	x^2y^2
Q.3.	If p and q are natural numbers and p is the multiple of q, then the HCF of p and q is							
	A	pq	B	p	C	q	D	$p + q$
Q.4.	The greatest number which divides 281 and 1249, leaving remainder 5 and 7 respectively, is							
	A	23	B	276	C	138	D	69
Q.5.	Given $\text{HCF}(2520, 6600) = 40$, $\text{LCM}(2520, 6600) = 252 \times k$, then the value of k is							
	A	1650	B	1600	C	165	D	1625
Q.6.	In a formula racing competition, the time taken by two racing cars A and B to complete one round of the track is 30 minutes and p minutes respectively. If the cars meet again at the starting point for the first time after 90 minutes and the $\text{HCF}(30, p) = 15$, then the value of p is							
	A	45 minutes	B	60 minutes	C	75 minutes	D	180 minutes
Q.7.	If $p^2 = \frac{32}{50}$, then p is a/an							
	A	whole number	B	integer	C	rational number	D	irrational number

Q.8.	If $m^n = 32$, where m and n are positive integers, then the value of n^{m+n} is							
	A	2^7	B	5^2	C	4^8	D	5^7
Q.9.	If HCF of 144 and 180 is expressed in the form $13m - 3$, then the value of m is							
	A	2	B	3	C	4	D	5
Q.10.	The sum of exponents of prime factors in the prime factorisation of 196 is							
	A	3	B	4	C	5	D	2
Q.11.	If $a = 2^4 \times 3^3$, $b = 2^3 \times 3^2 \times 5$, $c = 3^n \times 5^2$ and $\text{LCM}(a, b, c) = (5^2 \times 3^4 \times 2^4)$, then n is							
	A	1	B	2	C	3	D	4
Q.12.	If $1080 = 2^x \times 3^y \times 5$, then $x - y$ is equal to							
	A	6	B	-1	C	1	D	0
Q.13.	Three bells ring at an interval of 4, 7 and 14 minutes. If all three bells rang at 6 am, the time at which the three bells will ring together next is							
	A	6: 14 am	B	6:32 am	C	6:28 am	D	6:30 am
ASSERTION AND REASONING								
	DIRECTION: In question number 11, a statement of Assertion (A) is followed by a statement of Reason (R). Choose the correct option (a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of Assertion (A) (b) Both Assertion (A) and Reason (R) are true and Reason (R) is not the correct explanation of Assertion (A) (c) Assertion (A) is true but reason (R) is false. (d) Assertion (A) is false but reason (R) is true.							
Q.14.	Assertion: $\sqrt{2} (5 - \sqrt{2})$ is an irrational number. Reason: Product of two irrational numbers is always irrational.							
Q.15.	Assertion: If the H.C.F. of two numbers is 16 and their product is 3072, then their L.C.M is 162. Reason: If a and b are two positive integers, then $\text{H.C.F.} \times \text{L.C.M.} = a \times b$							

ANSWERS

Q.1	D	Q.2	B	Q.3	C	Q.4	C	Q.5	A
Q.6	A	Q.7	C	Q.8	D	Q.9	B	Q.10	B
Q.11	D	Q.12	D	Q.13	C	Q.14	c	Q.15	d