PRACTICE QUESTIONS (REAL NUMBERS)
CLASS: X : MATHEMATICS

1. Find the least number that is divisible by all the numbers 1 to 10 (both inclusive).
2. If the LCM of a and 18 is 36 and the HCF of a and 18 is 2 then find the value of a.
3. If two positive integers p and q can be expressed as $p = ab^2$ and $q = a^3b$; a, b being prime numbers, then find LCM (p, q).
4. If p and q are positive integers such that $p = ab^2$ and $q = a^2b$, where 'a' and 'b' are prime numbers, then find the LCM (p, q).
5. If HCF of 510 and 92 is 2, then find the LCM.
6. Find the value of 'a', if HCF (a, 18) = 2 and LCM (a, 18) = 36.
7. The HCF of two numbers is 9 and their LCM is 2016. If the one number is 54, then find the other number.
8. Two numbers are in the ratio of 15:11. If their H.C.F. is 13, then find the numbers
9. Find the prime factorisation of 2120.
10. Find the prime factorisation of 108.
11. If p and q are two distinct prime numbers, then find their HCF.
12. Find the HCF of the smallest composite number and smallest prime number.
13. Find the LCM of smallest two-digit composite number and smallest composite number.
14. Find the ratio of LCM and HCF of the least composite and the least prime numbers.
15. The LCM of two numbers is 14 times their HCF. The sum of LCM and HCF is 600. If one number is 280, then find the other number
16. If HCF (26, 169) = 13, then find LCM (26, 169).
17. If HCF (90, 144) = 18, then find LCM (90, 144).
18. Show that the number 6^n never end with digit 0 for any natural number n.
19. Show that (7 x 13 x 11) +11 and (7 x 6 x 5 x 4 x 3 x 2 x 1) + 3 are composite numbers.
20. Find HCF and LCM of 625, 1125 and 2125 using prime factorisation.
21. Find the HCF and LCM of 96 and 404 using prime factorisation.
22. Find the HCF and LCM of 6, 72 and 120 using prime factorisation.
23. Given that √3 is irrational, prove that 5 + 2√3 is irrational.
24. Given that √5 is irrational, prove that 3 – 2√5 is irrational.
25. Given that √3 is irrational, prove that 2 – 5√3 is irrational.
26. Given that √5 is irrational, prove that 2 + 3√5 is irrational.
27. Prove that √3 is an irrational number.
28. Prove that √5 is an irrational number.
29. Prove that √2 + √3 is an irrational number
30. Prove that √3 + √5 is an irrational number

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