

ALPHA CLASSES

Class 10 Mathematics

1. Real Numbers**WORKSHEET**

Time	Reference Code
--	C10-M-01-T06-WS-01

ALPHA CLASSES DEOBAND | Session 2026–27 | CBSE Board Pattern

Name: _____ Roll No.: _____ Date: _____

Level 1 – Basic (Build Confidence)**Q1.** Express 252 as a product of its prime factors.**Q2.** Find the prime factorisation of 1500.**Q3.** Find the HCF of 18 and 30 using prime factorisation.**Q4.** Find the LCM of 16 and 24 using prime factorisation.**Q5.** State the Fundamental Theorem of Arithmetic in one sentence.**Q6.** The prime factorisation of a number is $2^3 \times 5^2$. What is the number?**Q7.** Find the HCF and LCM of 28 and 42.**Q8.** Are 15 and 28 co-prime? Justify using their prime factorisations.**Level 2 – Standard / Exam-Oriented****Q9.** Find the HCF and LCM of 306 and 657. Verify that $\text{HCF} \times \text{LCM} = \text{product of the two numbers}$.**Q10.** Find the LCM of 12, 18, and 20 using prime factorisation.**Q11.** The HCF of two numbers is 18 and their product is 12960. Find their LCM.**Q12.** Three runners start running on a circular track at the same time. They take 40 seconds, 60 seconds, and 80 seconds respectively to complete one round. After how many seconds will they meet at the starting point for the first time?**Q13.** Find the largest number that divides 245 and 1029, leaving remainder 5 in each case.**Q14.** The LCM of two numbers is 432 and their HCF is 12. If one number is 48, find the other number.**Q15.** Find the HCF of 65 and 117 and express it in the form $65m + 117n$ for some integers m and n .

Q16. Two tankers contain 850 litres and 680 litres of diesel respectively. Find the maximum capacity of a container that can measure the diesel of each tanker an exact number of times.

Do not write solutions on this sheet. Use a separate notebook for working.

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