

HCF and LCM

Chapter 9: HCF and LCM · Topic 1

Key Concept

HCF is the largest number that divides two or more numbers exactly, found by listing factors or using prime factorisation.

LCM is the smallest number that is a multiple of two or more numbers, found by listing multiples or using prime factorisation.

HCF is useful for simplifying fractions to their lowest terms and solving problems involving equal grouping.

LCM is useful for finding a common denominator when adding or subtracting fractions with different denominators.

Quick Revision Notes

- HCF: largest number dividing numbers exactly.
- Found via factors or prime factorisation.
- LCM: smallest common multiple of numbers.
- Found via multiples or prime factorisation.
- HCF simplifies fractions to lowest terms.
- It also helps equal grouping problems.
- LCM finds common denominators.
- This helps add/subtract different-denominator fractions.

Practice Questions

- 1 Find the HCF of 24 and 36.
- 2 Find the LCM of 5 and 8.
- 3 Simplify a fraction using HCF.
- 4 Add two fractions using LCM as the denominator.
- 5 Discuss the difference between HCF and LCM.
- 6 Solve a word problem using HCF or LCM.