

HCF and LCM

Chapter 8: HCF and LCM · Topic 1

Key Concept

To find HCF, we list the factors of each number and identify the largest factor common to both.

For example, factors of 12 (1,2,3,4,6,12) and 18 (1,2,3,6,9,18) share 6 as their highest common factor.

To find LCM, we list multiples of each number and find the smallest multiple common to both.

HCF and LCM are useful in simplifying fractions, solving problems about grouping items, and finding common time intervals.

Quick Revision Notes

- HCF is the largest common factor of numbers.
- LCM is the smallest common multiple of numbers.
- Factors of 12: 1,2,3,4,6,12.
- Factors of 18: 1,2,3,6,9,18.
- HCF of 12 and 18 is 6.
- LCM uses common multiples of numbers.
- HCF and LCM help simplify fractions.
- They help solve grouping and interval problems.

Practice Questions

- 1 Find the HCF of 8 and 12.
- 2 Find the LCM of 3 and 5.
- 3 List the factors of 20.
- 4 List the first five multiples of 6.
- 5 Discuss how HCF helps simplify a fraction.
- 6 Solve a problem using LCM.