

Multiplication of Larger Numbers

Chapter 9: Equal Groups · Topic 1

Key Concept

To multiply larger numbers, like 23×14 , we can break it down: multiply 23 by 4 (ones of 14), then 23 by 10 (tens of 14), and add the two results together.

$23 \times 4 = 92$, and $23 \times 10 = 230$. Adding these: $92 + 230 = 322$, so $23 \times 14 = 322$.

This method, called the distributive method, breaks a hard multiplication into smaller, easier steps that we can solve one at a time.

Practising multiplication of larger numbers prepares us for solving real-world problems involving bigger quantities, like total costs or total distances.

Quick Revision Notes

- We break larger multiplication into smaller steps.
- $23 \times 14 = (23 \times 4) + (23 \times 10)$.
- $23 \times 4 = 92$, and $23 \times 10 = 230$.
- $92 + 230 = 322$, so $23 \times 14 = 322$.
- This is called the distributive method.
- Breaking problems into steps makes them easier.
- This method works for any 2-digit multiplication.
- Practice prepares us for real-world problems.

Practice Questions

- 1 Solve: 25×13 using the distributive method.
- 2 Solve: 34×21 .
- 3 Break down 42×15 into smaller steps.
- 4 Create your own 2-digit by 2-digit multiplication problem.
- 5 Check your answer using a different method.
- 6 Practice five larger multiplication problems.