

Multiplying Large Numbers

Chapter 4: We the Travellers–II · Topic 1

Key Concept

To multiply 234×23 , we break it down: multiply 234 by 3 (ones of 23), then 234 by 20 (tens of 23), and add the results together.

$234 \times 3 = 702$, and $234 \times 20 = 4,680$. Adding these: $702 + 4,680 = 5,382$, so $234 \times 23 = 5,382$.

This method, breaking multiplication into smaller parts based on place value, works for any size of number, though it takes more steps for bigger numbers.

Practising multiplication of large numbers prepares us for real-world calculations, like finding the total cost of many items or total distance over many trips.

Quick Revision Notes

- Break large multiplication into place value parts.
- $234 \times 23 = (234 \times 3) + (234 \times 20)$.
- $234 \times 3 = 702$, and $234 \times 20 = 4,680$.
- $702 + 4,680 = 5,382$.
- This method works for any size number.
- Bigger numbers need more steps.
- Practice prepares us for real-world calculations.
- Checking answers helps avoid mistakes.

Practice Questions

- 1 Solve: 145×24 using the place value method.
- 2 Solve: 320×18 .
- 3 Break down 256×32 into smaller steps.
- 4 Create your own large multiplication problem.
- 5 Check your answer using a different method.
- 6 Practice five large multiplication problems.