Lesson 17

Mental addition strategies — partitioning and compensating

MODULE 2 · OPERATIONS AND COMPUTATIONAL FLUENCY NUMBER

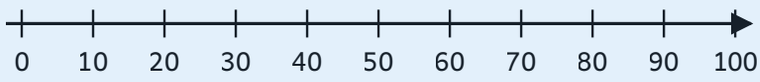
Two strategies make mental addition fast: **partitioning** (split each number into tens and units) and **compensating** (round one number, then adjust).

→ Partition: **47 + 36** → (40+30) + (7+6) = 70 + 13 = **83**.

→ Compensate: **48 + 36** → 50 + 36 = 86, then take 2 back: **84**.

TRY IT ON THE LINE

Use the number line to record your mental jumps. Choose ONE strategy per sum (partition, compensate, or bridge through ten) and draw your arcs above the line.



1. **47 + 38** — try partitioning (+30, then +8).
2. **48 + 36** — try compensating (+40, then −2).
3. **67 + 25** — try bridging through ten (+3 to 70, then +22).
4. Which strategy did you find easiest? Write its name: _____

PRACTICE

1. 5th class are running two cake sales to raise money for their school tour. At the first sale they raise **€251** and at the second sale they raise **€792**. How much have they raised in total?

2. The 5th class library has **249** fiction books and **570** non-fiction books on the shelves. How many books are in the class library altogether?

CHALLENGE

1. Mr Ó Briain prints **4190** maths worksheets and **9834** reading worksheets in the photocopier room for the whole school next term. How many worksheets has he printed in total?

2. 5th and 6th class are doing a sponsored cycle on the local cycle path. 5th class log **3427** laps over the term and 6th class log **6869** laps. How many laps do the two classes cycle altogether?