

Answer Key — Written Addition — With Regrouping

Year 4 Mathematics · Number and algebra · WA4MNAAS1

Section A — Fluency (16 marks, 1 mark each)

1. 533
2. 733
3. 923
4. 723
5. 3,915
6. 4,434
7. 6,443
8. 8,143
9. 8,032
10. 3,998
11. 8,400
12. 7,765
13. 9,247
14. 6,230
15. 8,043
16. 8,243

Section B — Core (21 marks)

1. $2,486 + 1,759 = 4,245$ loaves. [2 marks working, 1 mark correct answer]
2. $3,648 + 2,795 = \$6,443$. [2 marks working, 2 marks correct answer]
3. $1,467 + 2,386 = 3,853$ cars. [2 marks working, 1 mark correct answer]
4. $4,275 + 3,868 = \$8,143$. Yes, they reached their target — they raised \$143 more than the \$8,000 goal. [2 marks correct sum, 2 marks correct comparison]
5. $2,647 + 3,583 = 6,230\text{km}$. [2 marks working, 1 mark correct answer]
6. $5,647 + 2,385 = 8,032$, then $8,032 + 968 = 9,000$ units. [2 marks first addition, 2 marks second addition/total]

Section C — Reasoning (9 marks) — sample responses, award marks for valid reasoning

1. We start from the units because if a column's total is 10 or more, we need to carry a ten into the next column to the left — starting from the units makes sure every carry is included before we total the columns to its left. [2 marks]
2. Estimate: $376 \approx 400$, $258 \approx 300$, so the total should be about 700 — 524 is clearly too small. The correct answer is 634; Mia most likely forgot to carry the ten from the units column ($8+6=14$) into the tens column. [2 marks]
3. Regrouping means that when a column adds to 10 or more, we trade ten of that place value for one of the next place value up. In $48+37$, the units column is $8+7=15$: we keep the 5 units and regroup (carry) the extra 10 as 1 ten into the tens column, giving $4+3+1=8$ tens, so the answer is 85. [2 marks]

Written Addition — With Regrouping · WA4MNAAS1

4. False. Adding two 4-digit numbers can give a 5-digit answer if there's enough carrying, e.g. $8,547 + 6,832 = 15,379$, which has 5 digits. [2 marks valid example, 1 mark for correctly saying false]

Section D — Challenge (7 marks)

1. Any valid pair works, e.g. $6,748 + 3,252 = 10,000$ (units column $8+2=10$ needs regrouping). [2 marks for a valid pair]
2. $9,457 - 3,689 = 5,768$ (check: $3,689 + 5,768 = 9,457$). [2 marks]
3. $2,486 + 1,759 = 4,245$, then $4,245 + 968 = 5,213$. Yes, the teacher is correct — \$5,213 is over \$5,000. [2 marks correct total, 1 mark correct conclusion]