

Answer Key — Written Addition — No Regrouping

Year 4 Mathematics · Number and algebra · WA4MNAAS1

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

1. 3,377
2. 4,479
3. 3,344
4. 7,522
5. 3,333
6. 5,559
7. 7,468
8. 3,348
9. 4,546
10. 5,433
11. 3,663
12. 6,317
13. 3,576
14. 5,667
15. 5,553
16. 5,686

Section B — Core (21 marks)

1. $1,245 + 2,132 = \$3,377$. [2 marks working, 1 mark correct answer]
2. (a) $2,312 + 3,214 = 5,526$ tickets. (b) $6,000 - 5,526 = 474$ tickets unsold. [2 marks part (a), 2 marks part (b)]
3. $3,142 + 2,415 = 5,557$ people in total. [2 marks working, 1 mark correct answer]
4. (a) $1,324 + 2,432 = 3,756$ parcels. (b) $10,000 - 3,756 = 6,244$ parcels still needed. [2 marks part (a), 2 marks part (b)]
5. $2,103 + 1,541 = 3,644$ light bulbs. [2 marks working, 1 mark correct answer]
6. (a) $3,215 + 2,543 = 5,758$ books. (b) $7,000 - 5,758 = 1,242$ books still needed. [2 marks part (a), 2 marks part (b)]

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

1. No regrouping means that when you add the digits in each column (ones, tens, hundreds, thousands), none of the column totals reach 10 or more, so nothing needs to be carried into the next column. [2 marks]
2. Each pair of matching digits adds to 9 or less (e.g. $2+3=5$, $3+2=5$, $4+1=5$, $1+4=5$), so each column's total can be written directly underneath without carrying anything into the next column. [2 marks]
3. Starting from the ones column keeps the method consistent for every addition, including ones that do need regrouping, so it's a reliable habit to always use the same order. [2 marks]
4. True for a genuine no-regrouping sum: since no column sum reaches 10, the answer keeps the same number of digits as the numbers being added, e.g. $1,234 + 2,143 = 3,377$ (still 4 digits). If the thousands columns did add to 10 or

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more, that would actually involve regrouping, so it wouldn't be a no-regrouping sum anymore. [3 marks]

Section D — Challenge (7 marks)

1. Any pair of 4-digit numbers using digits 1–4 whose matching columns each sum to 5, e.g. $1,234 + 4,321 = 5,555$. [2 marks]
2. $3,468 - 1,234 = 2,234$. [2 marks]
3. Using 4 in every place of both numbers gives the biggest column sums ($4+4=8$, still no regrouping): $4,444 + 4,444 = 8,888$. [2 marks correct numbers, 1 mark correct total]