

Grade 4 - Adding and Subtracting Multi-Digit Numbers - Test Answer Key

Common Core 4.NBT.B.4 · maths-pdf.fr/en/

Use this answer key to score the test. Each solution shows the carries and regroups place by place, and the scoring note tells how the points are awarded. Total: 20 points.

Grade 4 · Common Core State Standards: **4.NBT.B.4**

Question 1 - Add four digits [2 pts]

$$\begin{array}{r} \textcolor{brown}{1} \text{ } \textcolor{brown}{1} \text{ } \textcolor{brown}{1} \\ 5,968 \\ + 2,745 \\ \hline \textcolor{blue}{8},\textcolor{blue}{7}\textcolor{blue}{1}\textcolor{blue}{3} \end{array}$$

Carries in the tens, hundreds, and thousands.

Ones: $8+5=13$, carry 1. Tens: $6+4+1=11$, carry 1. Hundreds: $9+7+1=17$, carry 1. Thousands: $5+2+1=8$.

8,713

Scoring: 2 points for 8,713. 1 point if one carry is missed.

Question 2 - Subtract five digits [2 pts]

Regroup: 73,204 is 6 ten thousands, 12 thousands, 11 hundreds, 9 tens, and 14 ones.

Ones: $14-7=7$. Tens: $9-5=4$. Hundreds: $11-9=2$. Thousands: $12-8=4$. Ten thousands: $6-4=2$.

24,247

Scoring: 2 points for 24,247. 1 point for one place error.

Question 3 - Subtract across zeros [2 pts]

	10,000s	1,000s	100s	10s	1s
Start	9	0	0	0	0
Regroup	8	9	9	9	10

Regroup 90,000 before subtracting.

Ones: $10 - 2 = 8$. Tens: $9 - 6 = 3$. Hundreds: $9 - 8 = 1$. Thousands: $9 - 7 = 2$. Ten thousands: $8 - 3 = 5$.

Check: $52,138 + 37,862 = 90,000$.

52,138

Scoring: 2 points for 52,138. 1 point for correct regrouping with one subtraction error.

Question 4 - Add six digits [2 pts]

Ones: $4 + 9 = 13$, write 3, carry 1. Tens: $6 + 5 + 1 = 12$, write 2, carry 1. Hundreds: $7 + 6 + 1 = 14$, write 4, carry 1. Thousands: $5 + 7 + 1 = 13$, write 3, carry 1. Ten thousands: $8 + 1 + 1 = 10$, write 0, carry 1. Hundred thousands: $2 + 4 + 1 = 7$.

703,423

Scoring: 2 points for 703,423. 1 point if one carry is missed.

Question 5 - Check the answer [2 pts]

Check: $3,861 + 2,739 = 6,600$, not 6,500. Maya is not correct.

Correct: 6,500 is 5 thousands, 14 hundreds, 9 tens, and 10 ones. Ones: $10 - 9 = 1$. Tens: $9 - 3 = 6$. Hundreds: $14 - 7 = 7$. Thousands: $5 - 2 = 3$. The difference is 3,761. Check: $3,761 + 2,739 = 6,500$.

Not correct; 3,761

Scoring: 1 point for the check showing 6,600. 1 point for 3,761.

Question 6 - Find the mistake [2 pts]

Ones: $7+5=12$, write 2, carry 1. Tens: $6+4+1=11$, write 1, carry 1. Hundreds: $3+8+1=12$, write 2, carry 1. Thousands: $8+5+1=14$, write 4, carry 1. Ten thousands: $4+2+1=7$.

Noah forgot to carry from the tens to the hundreds, so his hundreds digit is 1 instead of 2.
Correct sum: 74,212.

Scoring: 1 point for naming the missed carry. 1 point for 74,212.

Question 7 - Stadium seats [3 pts]

- a. $18,450-14,963=3,487$. 3,487 **seats**
- b. $14,963+16,209=31,172$. 31,172 **fans**
- c. $16,209-14,963=1,246$. 1,246 **more fans**

Scoring: 1 point for each part.

Question 8 - Fundraiser [3 pts]

- a. $12,480+9,765=22,245$. \$22,245.00
- b. $22,245-7,950=14,295$. \$14,295.00
- c. $14,295+7,950=22,245$, which is the total raised, so the answer is correct.

Scoring: 1 point for each part.

Question 9 - Is it reasonable? [2 pts]

62,185 rounds to 60,000 and 24,790 rounds to 20,000. Estimate: $60,000-20,000=40,000$.

Sofia's answer, 47,395, is more than 7,000 away from the estimate, so it is not reasonable.

Correct difference: $62,185-24,790=37,395$, which is close to 40,000.

37,395

Scoring: 1 point for the estimate and the decision. 1 point for 37,395.

Total

20 points