



GRADE 4 / WATCH MR DJ SOLVE

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

Start with the same example used in the lesson slides.

**WATCH MR DJ SOLVE**

Estimate, then find $3,685 + 2,478$ using aligned columns. Label any regrouped units and check by subtraction.

- 1 Align ones with ones, tens with tens, and so on. Add each place and exchange ten units for one unit of the next place when needed.
- 2 $3,685 + 2,478 = 6,163$.
- 3 Check: $6,163 - 2,478 = 3,685$.

Answer: **6,163**



REMEMBER Align equal units. Exchange ten of one unit for one of the next when adding, and rename larger units when subtracting. Check with the inverse operation.

Read each step and explain why it is valid. The next pages demonstrate the methods in more detail. Then use the large work areas on the numbered practice pages.

GRADE 4 / WORKED METHODS

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Add with exchanges between units

$3,685 + 2,478 = 6,163$

1. Ones: $5 + 8 = 13$. Write 3 ones and exchange 10 ones for 1 ten.
2. Tens: $8 + 7 + 1 = 16$. Write 6 tens and exchange 10 tens for 1 hundred.
3. Hundreds: $6 + 4 + 1 = 11$. Exchange again. Thousands: $3 + 2 + 1 = 6$. Check $6,163 - 2,478 = 3,685$.

$$\begin{array}{r} 3\ 6\ 8\ 5 \\ +\ 2\ 4\ 7\ 8 \\ \hline 6\ 1\ 6\ 3 \end{array}$$

GRADE 4 / WORKED METHODS

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Read a complete example before trying the matching method.



Use these examples as a reference. Keep each quantity and its unit visible. A different valid method is welcome unless a question specifically requests one.

Subtract across zero places

$6,002 - 2,785 = 3,217$

1. Rename 6 thousands 0 hundreds 0 tens 2 ones as 5 thousands, 9 hundreds, 9 tens, 12 ones.
2. Subtract equal units: $12 - 5 = 7$; $9 - 8 = 1$; $9 - 7 = 2$; $5 - 2 = 3$.
3. Check: $3,217 + 2,785 = 6,002$. Every exchange preserved the original value.

Renamed: 5 thousands | 9 hundreds | 9 tens | 12 ones

Subtract: 2 thousands | 7 hundreds | 8 tens | 5 ones

Result: 3 thousands | 2 hundreds | 1 ten | 7 ones



Date _____

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

1. Estimate, then find $27,408 + 56,795$ using aligned columns. Label any regrouped units and check by subtraction.

My answer / conclusion: _____

GRADE 4 / PRACTICE

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

◀ Mild 2. Estimate, then find $6,002 - 2,785$ using aligned columns. Show any exchanges, including across zeros. Check by addition.

My answer / conclusion: _____



Date _____

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

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Medium 3. Estimate, then find $40,506 - 18,729$ using aligned columns. Show any exchanges, including across zeros. Check by addition.

My answer / conclusion: _____

GRADE 4 / PRACTICE

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Medium

4. Estimate, then find $158,076 + 246,958$ using aligned columns. Label any regrouped units and check by subtraction.

My answer / conclusion: _____

GRADE 4 / PRACTICE

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Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

Medium

5. Estimate, then find $300,000 - 149,875$ using aligned columns. Show any exchanges, including across zeros. Check by addition.

My answer / conclusion: _____

GRADE 4 / PRACTICE

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Show the method, label your work, and explain the reasoning requested.



Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🌶️🌶️🌶️ Spicy

6. A student finds $4,002 - 1,786 = 3,784$ by subtracting the smaller digit from the larger in each column. Repair the work and explain.

My answer / conclusion: _____



Date _____

ADDING AND SUBTRACTING MULTI-DIGIT NUMBERS

A cartoon fox mascot with orange fur, large eyes, and a purple scarf, holding a yellow pencil.

Use the worked-method reference when helpful. Use the included method reference. Show the requested method, then check your answer. Reasoning questions need evidence and an explanation.

🔥🔥 Spicy 7. Compare $3,998 + 2,457$ with $4,000 + 2,455$. Explain why compensation preserves the sum.

My answer / conclusion: _____

8. Without computing both differences, compare $8,005 - 2,998$ and $8,007 - 3,000$.

Explain with a number line or equal changes.

My answer / conclusion: _____