

Adding Using the Long Method

Instructions: Adding Using the Long Method

The long method for addition is a step-by-step way to add large numbers. Follow these steps:

1. **Write the numbers in columns:** Line up the digits according to their place value (ones under ones, tens under tens, etc.).
2. **Start from the right (ones place):** Add the digits in the rightmost column. If the sum is 10 or more, write the ones digit below the line and carry the tens digit to the next column on the left.
3. **Move to the next column to the left:** Add the digits in this column, including any number you carried over. Again, if the sum is 10 or more, write the ones digit and carry the tens.
4. **Repeat for all columns:** Continue this process for each column, moving left.
5. **Write the final answer:** After the last column, if there is a number to carry, write it in front of your answer.

Example

Let's add 347 and 586 using the long method:

$$\begin{array}{r} 347 \\ + 586 \\ \hline \end{array}$$

1. **Add the ones place:** $7 + 6 = 13$. Write 3, carry over 1.
2. **Add the tens place:** $4 + 8 = 12$, plus the carried over 1 = 13. Write 3, carry over 1.
3. **Add the hundreds place:** $3 + 5 = 8$, plus the carried over 1 = 9.

So, the answer is:

$$\begin{array}{r} 347 \\ + 586 \\ \hline 933 \end{array}$$

$$347 + 586 = 933$$

Important: Always start adding from the rightmost digit and remember to carry over when the sum is 10 or more.

Maths with Melissa

Practice Questions

Use the long method to solve the following addition problems. Show your working for each step.

1. Add 256 and 487.
2. Add 634 and 289.
3. Add 523 and 478.
4. Add 179 and 653.
5. Add 812 and 159.
6. Add 345 and 678.
7. Add 492 and 308.
8. Add 721 and 184.
9. Add 567 and 295.
10. Add 438 and 527.

Answer Key

1. $256 + 487 = 743$
2. $634 + 289 = 923$
3. $523 + 478 = 1001$
4. $179 + 653 = 832$
5. $812 + 159 = 971$
6. $345 + 678 = 1023$
7. $492 + 308 = 800$
8. $721 + 184 = 905$
9. $567 + 295 = 862$
10. $438 + 527 = 965$