

2nd Grade Math: Mental Addition

What Is Mental Addition?

Mental addition means adding numbers in your head without writing them down or using a calculator. It's a helpful skill that makes solving math problems quicker and easier.

Strategies for Mental Addition

1. **Counting On:**
 - Start with the bigger number and count up.
 - **Example:** To add $7 + 3$, start with 7 and count: 8, 9, 10. The sum is 10.
2. **Making Tens:**
 - Break numbers apart to make a group of ten.
 - **Example:** To add $8 + 5$, think of 8 as $10 - 2$. Add $10 + 3$ (since 5 is 3 more than 2) = 13.
3. **Add in Parts:**
 - Break numbers into smaller, easier parts.
 - **Example:** To add $16 + 8$, break 16 into 10 and 6. Add $10 + 8 = 18$, then $18 + 6 = 24$.
4. **Round and Adjust:**
 - Round one number to the nearest ten, add, then adjust.
 - **Example:** To add $29 + 6$, round 29 to 30. Add $30 + 6 = 36$, then subtract 1 (because 29 is 1 less than 30). The sum is 35.

Example: Mental Addition

Problem: What is $12 + 9$?

Solution:

- Start with 12.
- Add 9 by breaking it into $8 + 1$.
- $12 + 8 = 20$, then add 1: $20 + 1 = 21$.
- The sum is **21**.

Real-World Example of Mental Addition

Scenario: You have 17 pencils, and you find 8 more in your drawer. How many pencils do you have in total?

- **Break 8 into $3 + 5$.**
- Add $17 + 3 = 20$, then $20 + 5 = 25$.
- You have **25 pencils**.

Practice Problems

1. **Problem:** Add $15 + 7$.

- **Solution:** $15 + 5 = 20$, then $20 + 2 = 22$.
- The sum is **22**.
- 2. **Problem:** Add $23 + 9$.
 - **Solution:** Round 23 to 20, then add 9. $20 + 9 = 29$, add back 3: $29 + 3 = 32$.
 - The sum is **32**.

Benefits of Mental Addition

- **Quick Calculation:** You can solve problems faster without using paper.
- **Improves Focus:** Helps sharpen your mind and attention to numbers.
- **Useful in Daily Life:** Mental math helps with activities like shopping, counting money, or measuring.

Conclusion

Mental addition is a powerful tool for quickly adding numbers without writing them down. By practicing strategies like **counting on**, **making tens**, and **rounding**, students can become faster and more confident in solving addition problems mentally.