1st Grade Math: Addition with Regrouping

What is Addition with Regrouping?

Addition with regrouping (also known as carrying) involves adding two or more numbers where the sum of the digits in one place value (ones, tens, etc.) exceeds 9. In this case, we need to "regroup" or carry over to the next place value.

How to Perform Addition with Regrouping

Step-by-Step Process:

1. Write the Numbers Vertically:

- a. Align the numbers by place value (ones under ones, tens under tens).
- b. For example, to add 47 and 36:

Add the Ones Place:

- · Start with the rightmost column (the ones place).
- · Add the digits in the ones place (7 and 6):
 - 7+6=13
- Since 13 is greater than 9, regroup:
 - Write down 3 in the ones place below the line and 1 (the ten from 13) above the tens column.

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markdown

1 (regrouped)

47
+ 36
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83
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4. Final Answer:

The total sum of 47 and 36 is 83.

Why is it Important?

- **Building Blocks for Math Skills:** Understanding addition with regrouping is essential for tackling larger numbers and more complex math operations later on.
- **Critical Thinking Development:** Regrouping encourages students to think critically about numbers and develop their problem-solving skills.

Practice Problems

Here are some practice problems for students to try:

- 1. Add 28 + 57
 - Ones: 8+7=15 (write down 5, carry over 1)
 - Tens: 2+5+1=8
 - Answer: 85
- 2. Add 39 + 47
 - Ones: 9+7=16 (write down 6, carry over 1)
 - Tens: 3+4+1=8
 - Answer: 86
- 3. Add 56 + 38
 - Ones: 6+8=14 (write down 4, carry over 1)
 - Tens: 5+3+1=9
 - Answer: 94

Visual Aids

Using **visual aids** like **place value charts, number lines, or base ten blocks** can enhance understanding:

- **Place Value Charts:** Display how numbers are broken down into tens and ones, and how regrouping works when the ones column exceeds 9.
- **Base Ten Blocks:** Use blocks to represent numbers visually. For instance, show 4 tens and 7 ones, then add 3 tens and 6 ones to demonstrate how to regroup.

Summary

- Addition with regrouping involves adding numbers where the sum in one column exceeds 9, necessitating carrying over to the next column.
- Follow the steps of aligning numbers, adding the ones (and regrouping if necessary), adding the tens, and writing down the final answer.

• Practice problems and visual aids help reinforce this important math skill.

By mastering addition with regrouping, students will build confidence and a strong foundation for future math challenges!