

1st Grade Math: **Subtraction with Regrouping**

What is Subtraction with Regrouping?

Subtraction with regrouping occurs when the top digit in a column (ones, tens, etc.) is smaller than the bottom digit, so we need to "borrow" from the next place value. This is also called **borrowing**.

How to Perform Subtraction with Regrouping

Step-by-Step Process:

1. Write the Numbers Vertically:

- a. Align the numbers by their place values (ones under ones, tens under tens).
- b. For example, to subtract 27 from 53:

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```
53
- 27
-----
```

2. Subtract the Ones Place:

- Start with the ones column (rightmost).
- Try to subtract the ones digits: $3 - 7$.
 - Since 3 is smaller than 7, you cannot subtract directly.
- **Regroup** by borrowing 1 ten from the tens place. This turns 5 tens into 4 tens, and adds 10 to the ones place. Now, instead of 3 ones, you have **13** ones.

3. Subtract the Ones Again:

- Now, subtract $13 - 7 = 6$.
- Write the 6 in the ones place below the line.

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```
4 13
- 2 7
-----
  6
```

4. Subtract the Tens Place:

- Now move to the tens column.
- Subtract the digits in the tens place: $4 - 2 = 2$.
- Write this difference in the tens place below the line.

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```
  4 13
-  2 7
-----
    26
```

5. Final Answer:

- The total difference of 53 and 27 is 26.

Why is Regrouping Important?

- **Handling Larger Numbers:** Regrouping allows us to subtract when the top number in a place value is smaller than the number below it.
- **Builds Number Sense:** Regrouping helps students understand the relationship between place values, particularly tens and ones.

Practice Problems

Let's practice subtraction with regrouping:

1. Subtract $42 - 19$

- Step 1: Ones place: $2 - 9$ (We cannot subtract, so regroup.)
 - Regroup: $12 - 9 = 3$
- Step 2: Tens place: $3 - 1 = 2$
- Answer: 23

2. Subtract $81 - 34$

- Step 1: Ones place: $1 - 4$ (We cannot subtract, so regroup.)
 - Regroup: $11 - 4 = 7$
- Step 2: Tens place: $7 - 3 = 4$
- Answer: 47

Visual Aids

Using **visual aids** can help students better understand subtraction with regrouping:

- **Base Ten Blocks:** Show students how to break a ten into 10 ones when regrouping.
- **Number Line:** Help students see how to "jump" back by breaking a number into tens and ones.
- **Drawings:** Encourage students to draw representations of numbers to help them visualize the borrowing process.

Summary

- **Subtraction with regrouping** is needed when the top number in a place value is smaller than the bottom number.
- Regroup by borrowing from the next place value to make subtraction possible.
- Follow the steps: align numbers, regroup if needed, subtract, and write the final answer.

This important skill builds a foundation for more advanced math operations like multi-digit subtraction and prepares students for solving real-world problems involving larger numbers!