

2nd Grade Math: Addition with Regrouping in 10s

What Does Addition with Regrouping in 10s Mean?

Addition with regrouping in 10s involves adding two-digit numbers where the sum of the digits in the tens place exceeds 9. When this happens, you need to carry over to the hundreds place.

Steps for Adding Two-Digit Numbers with Regrouping in 10s

1. **Line Up the Numbers:** Write the numbers one above the other, aligning them by place value (tens and ones).
2. **Add the Ones Place:** Start by adding the digits in the ones place.
3. **Add the Tens Place:** Add the digits in the tens place.
4. **Regroup if Necessary:** If the sum of the tens place is 10 or more, write down the ones digit and carry over the tens digit to the hundreds place.
5. **Write the Final Sum:** Combine the results to get the final answer.

Example 1: Adding Two-Digit Numbers with Regrouping in 10s

Problem: Add $67 + 58$.

Step 1: Line up the numbers.

```
diff
67
+ 58
```

Copy code

Step 2: Add the ones place:

$$7 + 8 = 15.$$

- Write down 5 and carry over 1 to the tens place.

Step 3: Add the tens place:

$$6 + 5 + 1 \text{ (carried over)} = 12.$$

- Write down 2 and carry over 1 to the hundreds place.

Step 4: Since there's nothing to add in the hundreds place, the result is 12.

Final Sum: The sum is **125**.

Example 2: Adding Two-Digit Numbers with Regrouping in 10s

Problem: Add $85 + 47$.

Step 1: Line up the numbers.

```
diff                                                                    Copy code

  85
+ 47
```

Step 2: Add the ones place:

$$5 + 7 = 12.$$

- Write down 2 and carry over 1 to the tens place.

Step 3: Add the tens place:

$$8 + 4 + 1 \text{ (carried over)} = 13.$$

- Write down 3 and carry over 1 to the hundreds place.

Step 4: Since there's nothing to add in the hundreds place, the result is 1.

Final Sum: The sum is 132.

Practice Problems

1. Add the following two-digit numbers:
 - $76 + 29 = \underline{\quad}$
 - $48 + 35 = \underline{\quad}$
 - $93 + 27 = \underline{\quad}$
2. Fill in the blanks:
 - $54 + \underline{\quad} = 100$
 - $\underline{\quad} + 62 = 119$
3. Solve these addition problems with regrouping in 10s:
 - $39 + 64 = \underline{\quad}$
 - $58 + 46 = \underline{\quad}$

Conclusion

Addition with regrouping in 10s is a vital skill for solving more complex addition problems. By practicing the steps and engaging in fun activities, students can become confident in adding two-digit numbers that require carrying over to the next place value.