

Final Review: Balancing Equations for Third Grade



I. What Are Equations?

An equation is a mathematical sentence that shows two expressions are equal. It uses the equal sign (=) to show both sides of the equation are the same.

For example:

 $3 \times 4 = 12$

 $20 \div 4 = 5$

In both examples, the number on the left side of the equation is equal to the number on the right side.

II. Balancing Equations

When balancing equations, you want both sides to be equal. Sometimes, one side of the equation will have a missing number. Your job is to figure out what number should go in the blank so both sides are equal.

Example: $5 \times _ = 25$

To balance the equation, you need to find the number that, when multiplied by 5, equals 25. The answer is 5, so the complete equation is: $5 \times 5 = 25$

III. Multiplication Equations

In multiplication equations, we find the missing number that, when multiplied by the known number, equals the result.

Example: 4 × _ = 16

Step 1: Think: "What number multiplied by 4 equals 16?"

The answer is 4, because $4 \times 4 = 16$.

IV. Division Equations

In division equations, we find the missing number that, when divided by the known number, gives the result.

Example: 24 ÷ _ = 6

Step 1: Think: "What number divided by 6 equals 24?"

The answer is 4, because 24÷4=6.