Solving and Graphing Inequalities

Today's Standard

7.EE.B4b - Solve word problems leading to inequalities of the form px + q > r or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid $50 per week plus $3 per sale. This week you want your pay to be at least $100. Write an inequality for the number of sales you need to make, and describe the solutions.

Real-World Applications for this Standard

Budgeting and financial planning; Comparing costs and benefits; Determining minimum requirements for goals; Sales and commissions calculations

Today I Learned

Today, we learned how to solve problems that use inequalities. For example, if you want to earn a certain amount of money, you can use inequalities to figure out how many things you need to sell.

Common Stumbling Blocks

Sometimes, kids think the inequality symbol changes direction when adding or subtracting, but it only changes with multiplication or division by a negative number. Also, kids might mix up the symbols '>' and '>='.

Quiz Me

- What is an inequality?
- How do you graph an inequality?
- What happens to the inequality symbol when you multiply by a negative number?
- Can you give an example of a word problem that uses an inequality?
- What does the solution set of an inequality mean?

Help Me

Inequalities help us solve real-world problems, like figuring out how many sales you need to make to earn a certain amount of money. They show us all the possible solutions that work.