

Name _____

Solve Problems Using Equations and Inequalities

Dear Family,

Your child is learning to write and solve equations and inequalities that represent real-world situations. He or she is using models to represent these situations and to help translate these situations into mathematical sentences. Your child is also learning to graph solutions of inequalities on number lines.

Here is an activity you can do with your child to help him or her practice solving and graphing inequalities.

Solve and Graph Inequalities

Materials: number cube

Step 1 Roll a number cube three times. Write a one-digit number and a two-digit number using the digits you rolled.

Step 2 Write an inequality using the two numbers, a variable, and one of the inequality symbols $<$, $>$, $\leq$, or $\geq$. For example, if you roll the numbers 4, 6, and 1, you might write $x + 4 \leq 61$.

Step 3 Ask your child to solve the inequality and graph the solution.

Observe Your Child

Focus on Mathematical Practices

Construct viable arguments and critique the reasoning of others.

Help your child become proficient with this Mathematical Practice. Have your child connect the graph to the inequality. Select a number that is not included in the graph, and ask your child to explain why this number is not a solution to the original inequality. Then select a number that is included in the graph, and ask your child to explain why this number is a solution.