Name _____

Analyze and Solve Systems of Linear Equations

> Dear Family,
>
> Your child is learning to analyze systems of linear equations by examining key features of the equations and to solve systems of linear equations using three different methods: graphing, substitution, and elimination. Many real-world problems can be solved using systems of linear equations, and your child will learn to solve such systems in a variety of contexts.
> Here is an activity you can do with your child to help him or her develop fluency with systems of linear equations.

Solving Systems of Linear Equations

Materials: 6 notecards or small pieces of paper, pencil, paper, graph paper

Write a linear equation on each of the six cards. You can use the equations below, or you and your child can create your own.

$y = 2x$; $y = -3x + 1$; $y = -3x$; $y = \frac{1}{2}x + 5$; $y = 4x - 1$; $y = 2x + 5$

Step 1 Shuffle the cards and select two cards at random to form a system of equations.

Step 2 Have your child examine the system to identify the number of solutions.

Step 3 Have your child solve the system using his or her choice of solution method—graphing, substitution, or elimination.

Observe Your Child

Focus on Mathematical Practices
Look for and make use of structure.

Help your child become proficient with this Mathematical Practice. Have your child explain how the parts of the equation help him or her determine the number of solutions.