

Model and Solve Multi-Step Problems



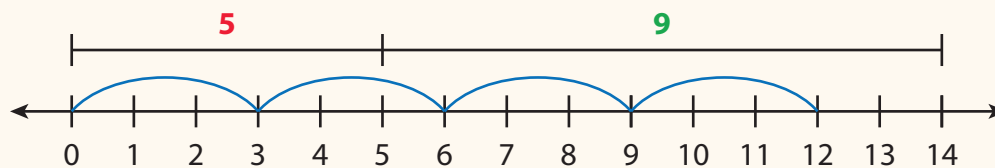
Dear Family,

This week your child is learning to model and solve multi-step problems.

Your child might see a problem like the one below.

Jana is making apple tarts. Each tart uses 3 apples. Jana has 5 red apples and 9 green apples. Write and solve an equation to find out how many apple tarts she can make.

Your child is learning to use a number line to help understand the problem and write an equation.



The number line shows the **5 red apples** and the **9 green apples** that Jana has. The curves above the number line show jumps of 3 because **3 apples** are needed to make each apple tart. Looking at the number line can help your child write an equation such as the one shown below.

$$(5 + 9) \div 3 = t$$

Your child can solve the equation for t , the number of apple tarts that Jana can make.

$$14 \div 3 = 4 \text{ R } 2$$

The answer to the problem is that Jana can make 4 apple tarts with 2 apples left over.

Invite your child to share what he or she knows about solving multi-step problems by doing the following activity together.



ACTIVITY MODELING AND SOLVING MULTI-STEP PROBLEMS

Do this activity with your child to model and solve multi-step problems.

- Work together with your child to look around the house or think about family activities that involve more than one of an item. Examples might be buying 6-packs of sports drinks or ordering an 8-slice pizza.
- Take turns. One person says a sentence about the item that includes the number of the item (for example, 6 bottles of sports drink or 8 slices of pizza). The second person asks a question about the item that uses a one-digit number.

For example: *There are 8 slices of pizza in a pizza pie.*
How many slices are in 2 pizzas?

- Work together with your child to answer the question. Then the first person asks how many of each item (sports drinks, slices of pizza, etc.) each person in your family would get if you divided the items among the number of people in your family. Would there be any items left over?
- Work together with your child to solve the problem. Encourage your child to write an equation that shows the information in the problem. Then work together to solve the equation.

Look for real-life opportunities to model and solve multi-step problems with your child.

