

Algebra & Functions for Primary Grades (1 - 2)

Teacher Directions

1. Put your finger on number 1. Look at the equation. What number goes in the box? Fill in the bubble next to your answer.
2. Move down to number 2. Listen carefully as I read. You will be asked to write an equation to solve the problem. There are 9 kittens playing. Some of the kittens climb into a box to take a nap. There are 5 kittens left playing. How many kittens are in the box? (**Re-read a second time**) Write an equation to show how to solve it. Turn to the next page.
3. Look at number 3. Listen carefully to the story so you can solve the problem. Jorge has 5 cars and 3 trucks. Martina has 7 cars. How many trucks does Martina need so she will have the same number of vehicles as Jorge? (**Re-read a second time**) Fill in the bubble next to the answer you choose.
4. Look at the target next to number 4. In this game 3 markers are dropped on the target and the sum is the score. The dots show where the markers landed on my first turn. What is my score? Fill in the bubble next to the correct score. Turn to the next page.
5. Put your finger on number 5. Look at the numbers in the box. They make a pattern. Fill in the missing numbers in the pattern. On the line, write the rule for the pattern in words, numbers, and/or symbols.
6. Look at the graph next to number 6 carefully. What do you know about the games students like to play from looking at the graph? Write as many statements as you can about what the graph tells us about the games students like to play. Turn to the next page.
7. Look at the function machine table. Think about how each number is changed when it goes into the machine. If I put 7 into this machine, what will come out? Put the number in the box.
8. Look at the function machine table again. What is the rule for the function machine? Write the rule on the line.

9. Find the number 9. Look at the expression $11-9$. What math story can you think of to go with $11-9$? Write a math story that matches $11-9$. Be sure to end with a question. Turn to the next page.

10. Put your finger on number 10. Look at the design under A. This is the beginning of a pattern that grows. Count with me to find how many tiles are in the design. (Count to 5). A five is written under the design to show there are 5 squares in this part of the pattern. Decide how you will make the pattern grow. Now look at the design under B. Trace over the dotted lines to copy the original design. Add squares to the design that will make your pattern grow. (**Allow time to complete term 2**). Count the number of squares in your new design and write that on the line under your design.

Now move to box C. In this box copy the design you made in box B. (**Allow time**). Make this design grow again, but make sure it grows in the same way your pattern in box B grew. (**Allow time**). Count the number of squares in this design and write the number on the line below your design. Now look carefully at the growing pattern you made. Look at how the pattern in box A grew in box B and C.

11. If you continued the pattern, how many squares would be in the next design? Write that number on the line next to 11.

12. Find number 12. On the lines write about the growing pattern you made. Be sure to tell how your pattern grows. Write about the patterns you see in the shapes. Write about the patterns you see in the numbers.