

YEAR

4

AfterMaths

Workbook

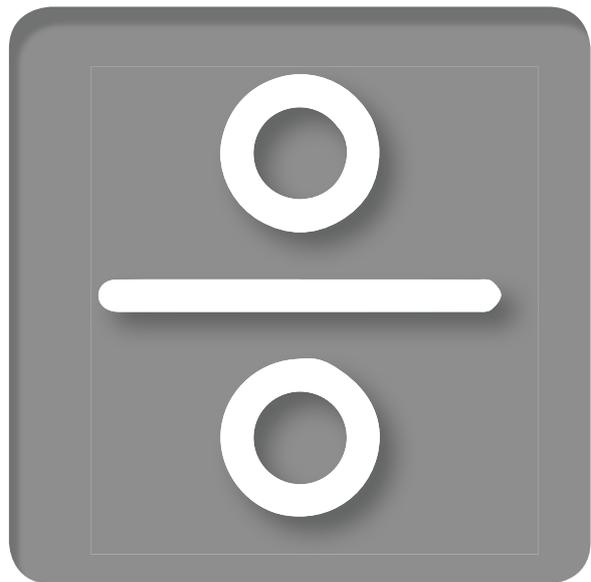
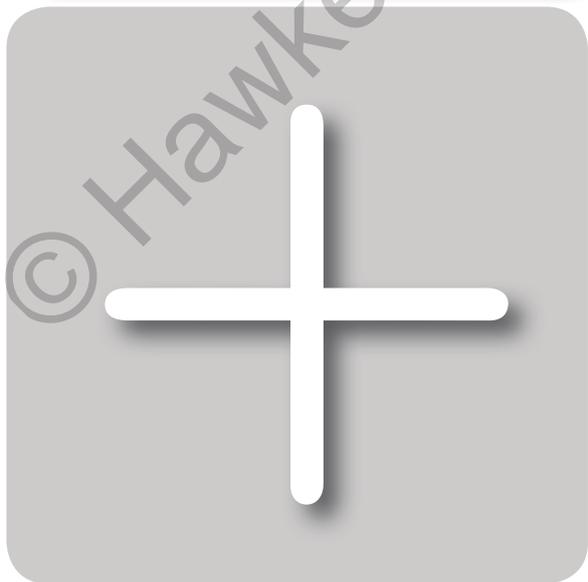
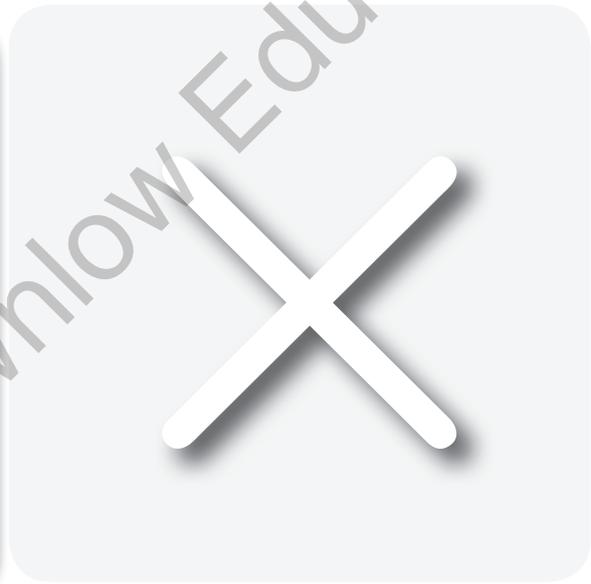
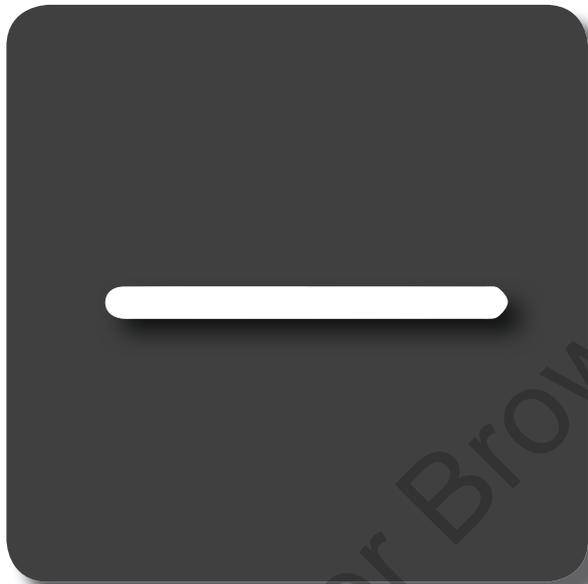


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Dear Student,

Welcome to *AfterMaths*[™], a program that allows you to explore mathematics. Inside this book are 36 activities. In these activities, you will play maths games, conduct experiments, solve problems and perform "maths magic".

AfterMaths is designed to allow you to work alone, with a partner or in a small group. You will try a variety of activities. By doing these activities, you will develop your maths skills and look at maths in new ways. You also will find that maths is part of your everyday life.

Some activities use skills that you already know. Other activities add to known skills. Still other activities provide challenges. The goal is always to have fun and to learn at the same time.

A famous man named Galileo once said that mathematics is the alphabet in which the universe was created. So, enjoy the activities and begin learning that "alphabet".

You may want to have materials such as the following on hand: pencils and erasers, scrap paper, a calculator and a ruler.

This *AfterMaths* book was prepared for students by Christopher Forest.

Designed by Jamie Ruh.

PICK A NUMBER

Making Numbers

5

2

3

1

8

Carla studied the five numbers above. Help her use the five numbers to create the following numbers.

1. the largest five-digit number that uses all of the digits _____
2. the smallest five-digit number that uses all of the digits _____
3. a subtraction problem that uses all five digits to make two different numbers that have a difference of 562 _____
4. one or more addition problems that use all five digits to make two different numbers that have a sum of 343 _____
5. three different numbers that together use all five digits and equal 46 _____

Magic Number

Follow these steps. Use the digits 0–9. See what magic number you get.

1. Write a two-digit number. The two digits should be different. _____
2. Reverse the number and write the new number. _____
3. Subtract the smaller number from the larger number. _____
4. Add the two digits in the answer. If the answer is a one-digit answer, just leave it alone. What is your answer? _____

Try this experiment at least two more times with different numbers. Do you always get the same answer? _____

THE WINNING NUMBER

Jonathan bought three raffle tickets at the school fair. If one of his tickets is picked, he will win a prize. Read about each raffle ticket. Use the clues to figure out the number on each ticket. Then see if Jonathan won the prize.

🎟️ Raffle Ticket One

On this ticket, the number 3 is in the tens place. In the hundreds place is the number equal to $5 - 1$. In the thousands place is the number that is 2 more than the number in the hundreds place. The number in the ones place is equal to the number in the tens place, plus 1, multiplied by 0. What is the number on Raffle Ticket One?

Ticket One

Number: _____

🎟️ Raffle Ticket Two

On this ticket, the number in the ones place is equal to 2×2 . In the hundreds place is the number equal to the number of school days in a week. In the tens place is the number that is equal to the number in the ones place plus 5. In the thousands place is the number equal to the total number of eyes found on three people. What is the number on Raffle Ticket Two?

Ticket Two

Number: _____

🎟️ Raffle Ticket Three

On this ticket, the number in the ones place is equal to $8 - 5$. In the tens place is the number of people in a trio. In the thousands place is the number equal to the number in the ones place plus the number in the tens place. In the hundreds place is the number that is 1 less than the number in the thousands place. What is the number on Raffle Ticket Three?

Ticket Three

Number: _____

Here are clues about the winning number.

In the thousands place is the number equal to 2 less than 8. In the tens place is the number equal to the number of things in a pair. In the hundreds place is the number equal to 3 more than 2. In the ones place is the number in the hundreds place times 1.

The winning number is: _____

Did Jonathan win? _____