

# Missouri MAP Grade 3 Math All-in-One

*Complete Lessons, Examples, Practice & Answer Key*

**Dr. A. Nazari**

Copyright © 2026 Dr. A. Nazari

Published by View Math Education

ViewMath.com

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the author, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law, including Section 107 or 108 of the 1976 United States Copyright Act.

The information in this book is distributed on an “as is” basis, without warranty. While every precaution has been taken in the preparation of this work, neither the author nor the publisher shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this book.

Copyright © 2026

WELCOME TO

# Grade 3 Math Made Easy!

Hi there, math superstar! ★

This book is **your** guide to all the amazing math you'll learn in Grade 3. Inside, you'll discover numbers, multiplication, fractions, shapes, and so much more!

✓ Math can be **fun**!

✓ You **can** do this!

✓ Mistakes help you **learn**!

Are you ready? Let's go! 🚀

“ I'm Owlbert, your math buddy! I'll be here to help you every step of the way! ”



# *How to Use This Book*

*Look for these special boxes as you read!*

## *Learning Goals*

*At the start of every topic, you'll see what you're about to learn. These are your targets!*

## *Concept Boxes*

*The big idea! This is where you'll learn new math concepts. Read these carefully.*

## *Worked Examples*

*Watch how problems are solved step by step. Follow along and try them yourself!*

## *Practice Problems*

*Your turn! Try these problems on your own. Check your answers at the back of the book.*



## *Owlbert Says*

*Your owl buddy shares tips, tricks, and encouragement. Listen to Owlbert!*

## *Tips & Hints*

*Helpful shortcuts and tricks to make math easier. Look for these throughout the book!*



## *Fun Facts*

*Cool things about math in the real world. Math is everywhere around you!*

## *Watch Out!*

*Common mistakes to avoid. Everyone makes them — but now you won't!*

✓ **Answers** to all practice problems are in the **Answer Key** at the back of the book!

PREVIEW



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)





# What Math Topics Will You Learn?

## Number Sense

- Place Value
- Comparing & Ordering
- Rounding
- Even & Odd Numbers

## Addition & Subtraction

- Adding 3-Digit Numbers
- Subtracting 3-Digit
- Adding 4-Digit Numbers
- Subtracting 4-Digit
- Estimating Sums & Differences

## Multiplication

- Understanding Multiplication
- Facts 0–5
- Facts 6–10
- Multiplying by 10 & 100

## Division

- Understanding Division
- Division Facts
- Relating  $\times$  &  $\div$

## Fractions

- Understanding Fractions
- Fractions on Number Line
- Comparing Fractions
- Equivalent Fractions

## Measurement

- Measuring Length
- Weight & Capacity
- Telling Time
- Elapsed Time

## Money

- Counting Money
- Adding & Subtracting Money

## Geometry

- 2D Shapes & Attributes
- 3D Shapes
- Perimeter
- Area

## Data & Graphs

- Picture Graphs
- Bar Graphs
- Line Plots

## Patterns & Problem Solving

- Number Patterns
- Word Problems

# X<sup>1</sup> Math Symbols You Should Know X<sup>1</sup>

You'll see these symbols throughout this book!

| Symbol        | Name             | What It Means                                               |                   |
|---------------|------------------|-------------------------------------------------------------|-------------------|
| +             | Plus (Add)       | Put numbers together.                                       | $3 + 5 = 8$       |
| -             | Minus (Subtract) | Take away from a number.                                    | $9 - 4 = 5$       |
| ×             | Times (Multiply) | Add equal groups.                                           | $4 \times 3 = 12$ |
| ÷             | Divide           | Split into equal groups.                                    | $12 \div 3 = 4$   |
| =             | Equals           | Both sides are the same.                                    | $2 + 3 = 5$       |
| >             | Greater Than     | The left number is bigger.                                  | $7 > 3$           |
| <             | Less Than        | The left number is smaller.                                 | $2 < 9$           |
| $\frac{1}{2}$ | Fraction Bar     | Part of a whole. $\frac{1}{2}$ means 1 out of 2 equal parts |                   |

## “ Remember the Alligator! ”



The **greater than** (>) and **less than** (<) symbols are like an alligator's mouth. The alligator always wants to eat the **bigger** number!

$$8 > 3$$

8 is greater than 3

$$2 < 9$$

2 is less than 9



Get Online



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



 **Key Math Words for Grade 3**

- **Sum** — the answer when you add
- **Difference** — the answer when you subtract
- **Product** — the answer when you multiply
- **Quotient** — the answer when you divide
- **Factor** — a number you multiply
- **Array** — objects in rows and columns
- **Fraction** — a part of a whole
- **Numerator** — the top number in a fraction
- **Denominator** — the bottom number
- **Equation** — a math sentence with =
- **Estimate** — a smart guess, close to the real answer
- **Perimeter** — the distance around a shape
- **Area** — the space inside a shape
- **Rounding** — making a number simpler by going to the nearest ten or hundred



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



# *Contents*



|          |                                                    |          |
|----------|----------------------------------------------------|----------|
| <b>1</b> | <b><i>Number Sense &amp; Place Value</i></b> ..... | <b>1</b> |
| 1.1      | <i>Place Value: Ones, Tens, Hundreds</i> .....     | 2        |
| <b>2</b> | <b><i>Multiplication &amp; Division</i></b> .....  | <b>8</b> |
| 2.1      | <i>Understanding Multiplication</i> .....          | 9        |



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



PREVIEW

CHAPTER

1

# Number Sense & Place Value

## ★ What's Inside ★

|                                             |   |
|---------------------------------------------|---|
| 1.1 Place Value: Ones, Tens, Hundreds ..... | 2 |
|---------------------------------------------|---|

## ★ 1.1 Place Value: Ones, Tens, Hundreds ★

### 🎯 In this lesson you will learn:

- Understand that digits have different values based on their position
- Identify the ones, tens, and hundreds places
- Write numbers in expanded form

What does the digit 3 mean in the number 345?



Owl

It means 3!



You

Not quite! It means 300 because it's in the **hundreds** place!



Owl

### 🎓 What Is Place Value?

**Place value** tells us how much a digit is worth based on where it sits in a number. The same digit can mean different things!

Look at the number 527:

| H | T | O |
|---|---|---|
| 5 | 2 | 7 |



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



- The **5** is in the **hundreds** place. It means 500.
- The **2** is in the **tens** place. It means 20.
- The **7** is in the **ones** place. It means 7.

So  $527 = 500 + 20 + 7$ .

### Place Value Words

**Digit** — A single number symbol: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

**Place Value** — The value of a digit based on its position in a number.

**Expanded Form** — A way to write a number showing the value of each digit.



“ Think of place value like a house! Ones live on the first floor; tens on the second floor; and hundreds on the top floor. The higher the floor, the bigger the value! ”

### Show 364 with Base-Ten Blocks

Let's break apart 364:



1. 3 hundreds = 300 (the big flat squares)
2. 6 tens = 60 (the long rods)
3. 4 ones = 4 (the tiny cubes)

✓ **Answer:**  $364 = 300 + 60 + 4$



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



 **Expanded Form of 892**

*Let's expand it:*

1. The 8 is in the hundreds place: 800
2. The 9 is in the tens place: 90
3. The 2 is in the ones place: 2

✓ **Answer:**  $892 = 800 + 90 + 2$

 **Your Turn!** Write 476 in expanded form: \_\_\_\_\_

 **Math in Real Life!**

When you see a price tag that says \$2.49, place value helps you understand it means 2 dollars, 4 dimes, and 9 pennies!

 **Let's Explore!**

*Digit Detective* Look at the number **753**. Answer these questions:

- Which digit is in the hundreds place? \_\_\_\_\_
- Which digit is in the tens place? \_\_\_\_\_
- Which digit is in the ones place? \_\_\_\_\_
- What is the value of the digit 5? \_\_\_\_\_

Now try the number **308**:



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



- What does the 0 mean? \_\_\_\_\_
- Write 308 in expanded form: \_\_\_\_\_

**TIP**

A 0 in a number is a placeholder. In 308, the 0 means there are zero tens. We write:  
 $308 = 300 + 0 + 8$ .



### Oops! Find the Mistake!

What Went Wrong? Maria says the value of the digit 6 in **461** is 6.

Is Maria correct? \_\_\_\_\_

The 6 is in the \_\_\_\_\_ place, so its value is \_\_\_\_\_.



### What We Learned

- Every digit in a number has a **place value**.
- The three places are: **hundreds, tens, and ones**.
- **Expanded form** shows the value of each digit:  $547 = 500 + 40 + 7$ .
- A 0 means there are none of that place value, but it holds the spot!



Get Online



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



 **Place Value Practice** **What Is the Value?**

Write the value of the underlined digit.

1.  $\underline{3}82$  \_\_\_\_\_

4.  $\underline{9}15$  \_\_\_\_\_

2.  $5\underline{6}1$  \_\_\_\_\_

5.  $2\underline{4}7$  \_\_\_\_\_

3.  $7\underline{0}4$  \_\_\_\_\_

6.  $63\underline{8}$  \_\_\_\_\_

**Write in Expanded Form**

7.  $259 =$  \_\_\_\_\_

8.  $730 =$  \_\_\_\_\_

9.  $406 =$  \_\_\_\_\_

10.  $815 =$  \_\_\_\_\_

**Write the Number**

Write the standard form.

11.  $600 + 30 + 9 =$  \_\_\_\_\_

12.  $200 + 50 + 1 =$  \_\_\_\_\_

13.  $400 + 0 + 7 =$  \_\_\_\_\_

14.  $100 + 80 + 0 =$  \_\_\_\_\_

**True or False?**

Get Online



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



**ViewMath.com**



15. In 347, the digit 4 has a value of 40.

True ☐ False ☐

16. In 902, the digit 0 has a value of 0.

True ☐ False ☐

17. In 618, the digit 6 is in the tens place.

True ☐ False ☐

18.  $500 + 70 + 3 = 573$

True ☐ False ☐

### Word Problems

19. Lily has 3 hundred-dollar bills, 5 ten-dollar bills, and 2 one-dollar bills. How much money does Lily have?

Answer: \_\_\_\_\_ dollars

20. A school has 648 students. What is the value of the digit 4 in 648?

Answer: \_\_\_\_\_



### Challenge! ★

21. I am a 3-digit number. My hundreds digit is 7. My tens digit is 2 more than my ones digit. My ones digit is 3. What number am I? \_\_\_\_\_

22. Use the digits 4, 8, and 1 to make the largest possible 3-digit number: \_\_\_\_\_

Now make the smallest possible 3-digit number: \_\_\_\_\_



★ **Awesome work! You now know that every digit has a special place and value!** ★



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



CHAPTER

2

## *Multiplication & Division*

### ★ *What's Inside* ★

|                                        |   |
|----------------------------------------|---|
| 2.1 Understanding Multiplication ..... | 9 |
|----------------------------------------|---|

## ★ 2.1 Understanding Multiplication ★

### 🎯 In this lesson you will learn:

- Understand multiplication as equal groups
- Read and write multiplication sentences
- Use pictures and arrays to show multiplication

### 📖 The Cookie Trays

Emma is setting up for a party. She puts 4 cookies on each tray. She fills 3 trays. How many cookies does she have?

You could count:  $4 + 4 + 4 = 12$ .

But there's a faster way — **multiplication!**

**Multiplication = Counting Equal Groups!**

### 🎓 What Is Multiplication?

**Multiplication** is a quick way to add **equal groups**.

$3 \times 4$  means "3 groups of 4"



$$3 \times 4 = 12$$



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



Instead of adding  $4 + 4 + 4$ , we multiply!

### Math Words

**Factor** — The numbers you multiply. In  $3 \times 4 = 12$ , the factors are 3 and 4.

**Product** — The answer when you multiply. In  $3 \times 4 = 12$ , the product is 12.

**Equal Groups** — Groups that all have the same number of items.



“ Think about it this way:  $5 \times 7$  means “5 groups of 7.” The first number tells you HOW MANY groups. The second tells you HOW MANY in each group! ”

### Reading a Multiplication Sentence

$$\underbrace{5}_{\text{groups}} \times \underbrace{7}_{\text{in each}} = \underbrace{35}_{\text{total}}$$

We say: “Five **times** seven equals thirty-five.”

Or: “Five **groups of** seven.”

### Show $2 \times 6$

$2 \times 6$  means 2 groups of 6:



$$2 \times 6 = 6 + 6 = 12$$

✓ **Answer:**  $2 \times 6 = 12$



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



### Show $4 \times 5$ with an Array

An **array** shows multiplication as rows and columns:



4 rows with 5 in each row.

✓ **Answer:**  $4 \times 5 = 20$

#### Equal Groups



3 groups of 4

Groups are circles of dots.

$$3 \times 4 = 12$$

#### Arrays



3 rows, 4 columns

Dots are lined up in a grid.

$$3 \times 4 = 12$$

 **Your Turn!** Draw 5 groups of 3 dots. What is  $5 \times 3$ ? \_\_\_\_\_

### Multiplication = Repeated Addition

Every multiplication can be written as addition:



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



$$\begin{array}{rcl}
 3 \times 5 & = & 5 + 5 + 5 = 15 \\
 4 \times 2 & = & 2 + 2 + 2 + 2 = 8 \\
 6 \times 3 & = & 3 + 3 + 3 + 3 + 3 + 3 = 18
 \end{array}$$

*But multiplication is much faster!*

### Let's Explore!

*Skip Counting and Multiplication Skip counting is multiplication in disguise!*



*Counting by 5s: 5, 10, 15, 20, 25, 30*

*The 6th number is 30. That means  $6 \times 5 = 30$ !*

*Now skip count by 3s to find  $4 \times 3$ :*

3, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

So  $4 \times 3 =$  \_\_\_\_\_

#### TIP

*You can use skip counting to multiply! To find  $7 \times 2$ , count by 2s seven times:  
2, 4, 6, 8, 10, 12, 14*

### Math in Real Life!

*Multiplication is everywhere!*

- 6 eggs in each row, 2 rows in a carton:  $2 \times 6 = 12$  eggs
- 4 wheels on each car, 5 cars:  $5 \times 4 = 20$  wheels
- 3 scoops per cone, 7 cones:  $7 \times 3 = 21$  scoops



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



**Oops! Find the Mistake!**

Jake says  $3 \times 5 = 8$ .

What did Jake do wrong? \_\_\_\_\_

Hint: Did Jake add or multiply?

The correct answer is: \_\_\_\_\_

**What We Learned**

- **Multiplication** means counting **equal groups**.
- $a \times b$  means “ $a$  groups of  $b$ .”
- The numbers being multiplied are **factors**. The answer is the **product**.
- You can show multiplication with **equal groups**, **arrays**, **skip counting**, or **repeated addition**.



Get Online



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



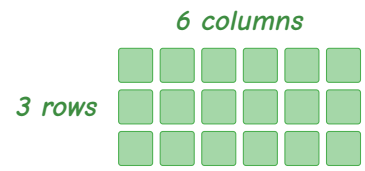
## ✎ Multiplication Practice ✎

### Write the Multiplication Sentence

Look at the groups and write a multiplication sentence.

1.  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

2.  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

3.  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

### Write as Repeated Addition AND Multiplication

4.  $4 + 4 + 4 =$  \_\_\_\_\_  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

5.  $7 + 7 =$  \_\_\_\_\_  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

6.  $6 + 6 + 6 + 6 + 6 =$  \_\_\_\_\_  $\rightarrow$  \_\_\_\_\_  $\times$  \_\_\_\_\_ = \_\_\_\_\_

### Multiply

7.  $2 \times 4 =$  \_\_\_\_\_

10.  $4 \times 5 =$  \_\_\_\_\_

8.  $3 \times 3 =$  \_\_\_\_\_

11.  $1 \times 8 =$  \_\_\_\_\_

9.  $5 \times 2 =$  \_\_\_\_\_

12.  $6 \times 2 =$  \_\_\_\_\_

### Word Problems



Get Online



Find more at  
[ViewMath.com/Grade3](http://ViewMath.com/Grade3)



 **ViewMath.com**



13. There are 5 bags with 4 apples in each bag. How many apples are there in all?

**Answer:** \_\_\_\_\_ apples

14. A parking lot has 3 rows of cars. Each row has 6 cars. How many cars are in the lot?

**Answer:** \_\_\_\_\_ cars

15. Ms. Lee gives each of her 7 students 2 stickers. How many stickers does she give out?

**Answer:** \_\_\_\_\_ stickers

### Hands-On Activity!

*Build Arrays! Use small objects (coins, blocks, or cereal pieces).*

1. Build an array with 3 rows and 5 columns. How many total? \_\_\_\_\_
2. Build an array with 4 rows and 4 columns. How many total? \_\_\_\_\_
3. Can you build TWO different arrays that both have 12 objects? Draw them!

★ You just learned one of the most powerful  
tools in math — multiplication! Way to go! ★



Find more at  
[ViewMath.com/Grade3](https://www.viewmath.com/Grade3)



THANK YOU

## Enjoyed This Preview?

### Get the Full Book!

*This preview shows just a small sample of what's inside.*

*The complete book includes:*

- ✓ *All chapters and topics*
- ✓ *Hundreds of practice problems*
- ✓ *Complete answer key with explanations*
- ✓ *Colorful visuals and step-by-step examples*
- ✓ *Reference sheets and progress trackers*

 Visit us at [ViewMath.com](https://www.viewmath.com) for free resources and more books!