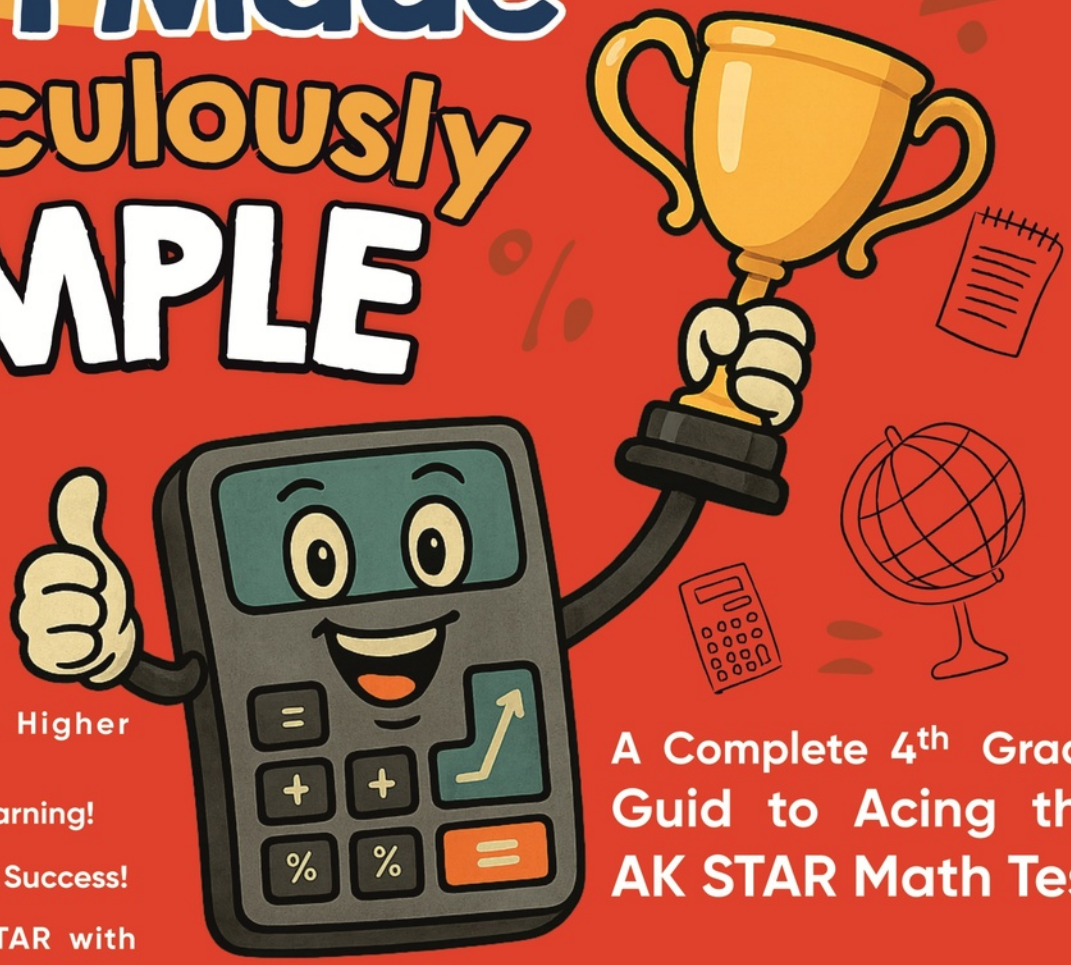
Alaska AK STAR Grade 4

Math Made Ridiculously SIMPLE



- Smarter Practice. Higher Scores.
- Fast, Fun, Focused Learning!
- Your Shortcut to Math Success!
- Conquer the AK STAR with

A Complete 4th Grade Guid to Acing the AK STAR Math Test

Learn Faster · Understand Deeper · Succeed with Confidence

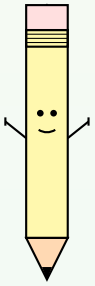
Reza Nazari

Alaska AK STAR Grade 4 Math Made Ridiculously Simple

A Comprehensive 4th Grade Guide to Acing AK STAR Math



Professor Owl



Pip

with Professor Owl and Pip

Reza Nazari

Copyright © 2026

Effortless Math Education Inc

Published by Effortless Math Education

www.effortlessmath.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.

Copyright © 2026

A Note for Parents and Teachers

Dear Parents and Teachers,

Welcome to **Alaska AK STAR Grade 4 Math Made Ridiculously Simple**! This book transforms complex 4^{th}-grade math into clear, engaging lessons that students can follow independently. Fourth grade introduces critical new ideas — multi-digit multiplication and division, fraction arithmetic, decimals, and geometric reasoning — and this book makes each one feel manageable.

What sets this book apart:

◇ **Lesson-first approach:** Every topic is *taught* before it is practiced
◇ **Visual explanations:** Diagrams, models, and flowcharts make abstract ideas concrete
◇ **Spiral review:** Concepts reappear so students build lasting understanding
◇ **Kid-friendly language:** Written at a level 4^{th} graders can read on their own
◇ **Aligned to Alaska AK STAR:** Every lesson maps to state standards

How to Get the Most From This Book

1. One topic at a time. Let your child read the lesson, study the examples, then try the practice problems. Resist the urge to rush through multiple topics in one sitting.

2. Encourage drawing and writing. Fourth graders learn best when they sketch models, write out steps, and organize their thinking on paper.

3. Talk about math at meals. "If we split this pizza into 8 slices and eat 3, what fraction is left?" makes math feel like a natural part of life.

4. Mistakes are gold. When your child gets something wrong, say: "Great! Now we know exactly what to work on next."

5. Celebrate the journey. Finishing a tough chapter deserves recognition just as much as getting a perfect score.

Your encouragement is the most powerful math tool your child has.



Walk and scan!
Do what you can!

Scan Me

Your Math Decoder Ring

Every explorer needs a way to read the language of math!

Symbols Every 4th Grader Must Know

Symbol	Meaning	Example
$+ \ - \ \times \ \div$	Add, Subtract, Multiply, Divide	$36 \times 24 = 864$
$=$	Is equal to	$\frac{2}{4} = \frac{1}{2}$
$\neq$	Is NOT equal to	$0.5 \neq 0.05$
$> \quad <$	Greater than / Less than	$4{,}250 > 4{,}025$
$\geq \quad \leq$	Greater or equal / Less or equal	$x \geq 10$
$\approx$	Approximately equal to	$2{,}978 \approx 3{,}000$
$\frac{a}{b}$	Fraction (a parts out of b)	$\frac{3}{8}$ = three-eighths
$\angle$	Angle	$\angle ABC = 55°$
$^\circ$	Degrees (angle measure)	A right angle $= 90°$
$\parallel$	Parallel (lines that never meet)	$\overline{AB} \parallel \overline{CD}$
$\perp$	Perpendicular (meet at 90°)	$\overline{EF} \perp \overline{GH}$

Scan Me

What's inside? Scan and find!

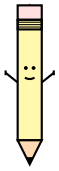


Power Words for 4th Grade Math

Word	What It Means
Factor	A number that divides evenly into another (factors of 12: 1, 2, 3, 4, 6, 12)
Multiple	The result of multiplying a number (multiples of 5: 5, 10, 15, 20 . . .)
Prime	A number with exactly 2 factors: 1 and itself (2, 3, 5, 7, 11 . . .)
Composite	A number with more than 2 factors (4, 6, 8, 9, 10 . . .)
Equivalent	Equal in value ($\frac{1}{2} = \frac{3}{6}$)
Numerator	The top number of a fraction (how many parts you have)
Denominator	The bottom number (how many equal parts in the whole)
Quotient	The answer to a division problem
Remainder	What is left over after dividing
Acute	An angle less than 90°
Obtuse	An angle greater than 90° but less than 180°
Symmetry	When one half of a shape mirrors the other

Pip's Tip: Keep this Decoder Ring page bookmarked! Flip back to it whenever you see a symbol or word you need to check. Real explorers use their maps over and over.

★ ✎ Comparing & Ordering Practice ✎ ★



Start from the greatest place value and compare digit by digit. Remember: more digits means a bigger number!

Compare. Write <, >, or =

1. 43,271 ___ 43,712

2. 109,350 ___ 98,999

3. 526,400 ___ 526,400

4. 82,046 ___ 82,064

5. 374,819 ___ 374,891

6. 7,983 ___ 10,001

Order from Least to Greatest

7. 56,480 56,048 56,804 _____

8. 203,710 230,170 203,701 _____

9. 99,999 100,000 99,099 _____

Order from Greatest to Least

10. 418,305 481,305 418,503 _____

11. 72,914 72,491 72,941 _____

Word Problems

12. Three stadiums hold 45,200, 45,020, and 54,200 people. Which stadium is the largest? _____ (holds _____ people)

13. A school raised $38,750 in January and $38,507 in February. Which month had more fundraising? _____

Challenge!

14. Using the digits 3, 7, 1, 9, 0, and 5 (each once), write the greatest possible 6-digit number and the least possible 6-digit number. Greatest: _____ Least: _____

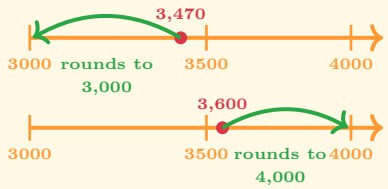


Scan me, zip! Take a trip!

Scan Me

Rounding to the Nearest 10, 100, and 1,000

The Number Line Method



The Rounding Rule

1. Find the place you are rounding to
2. Look at the digit to its **right**
3. If that digit is **0–4**: round **down**
4. If that digit is **5–9**: round **up**

Replace all digits to the right with zeros after rounding!

★ Worked Example

Round to Nearest 10

Round **3,847**:

1. **Find the tens digit:** 4 (the digit in the place we're rounding to)
2. **Look at the digit to the right:** 7 (the ones place)
3. **Compare:** $7 \geq 5$, so we round **up**. The 4 becomes 5; replace the rest with zeros.

Answer: 3,850

Round to Nearest 100

Round **52,361**:

1. **Find the hundreds digit:** 3 (the digit in the place we're rounding to)
2. **Look at the digit to the right:** 6 (the tens place)
3. **Compare:** $6 \geq 5$, so we round **up**. The 3 becomes 4; replace the rest with zeros.

Answer: 52,400

Round to Nearest 1,000

Round **246,319**:

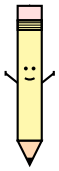
1. **Find the thousands digit:** 6 (the digit in the place we're rounding to)
2. **Look at the digit to the right:** 3 (the hundreds place)
3. **Compare:** $3 < 5$, so we round **down**. Keep the 6; replace the rest with zeros.

Answer: 246,000



"Rounding is like parking a car—you look at the nearest space. If the digit next door is 5 or more, move up! If it's 4 or less, stay put!"

★ ✎ Rounding Practice ✎ ★



Look at the digit to the RIGHT of where you're rounding. Is it 5 or more? Round up! Is it 4 or less? Round down!

Round to the Nearest 10

1. 347 ≈ _____ **2.** 2,582 ≈ _____ **3.** 61,445 ≈ _____

Round to the Nearest 100

4. 4,736 ≈ _____ **5.** 29,850 ≈ _____ **6.** 183,241 ≈ _____

7. 57,962 ≈ _____ **8.** 308,449 ≈ _____ **9.** 74,050 ≈ _____

Round to the Nearest 1,000

10. 8,614 ≈ _____ **11.** 46,500 ≈ _____ **12.** 273,199 ≈ _____

13. 125,750 ≈ _____ **14.** 499,501 ≈ _____ **15.** 37,409 ≈ _____

Word Problems

16. A school collected 4,375 cans for a food drive. Round this number to the nearest hundred.

_____ cans

17. A road is 28,650 meters long. Round this to the nearest thousand meters.

_____ meters

Challenge!

18. A number rounds to 45,000 when rounded to the nearest thousand. What is the *smallest* possible value of the number?

_____

19. What is the *largest* whole number that rounds to 7,200 when rounded to the nearest hundred?

_____



Times fun! Scan now!

Scan Me