

4

Alaska AK STAR

GRADE 4

MATH

PRACTICE TESTS



5 FULL-LENGTH
PRACTICE TESTS



Standards-Aligned Review with
Mixed Practice and Answer Key



STANDARDS-ALIGNED
REVIEW



$$4 \times 7 = 28$$

$$36 \div 9 = 4$$



MIXED PRACTICE
QUESTIONS



ANSWER KEY
INCLUDED

$$\begin{array}{r} 125 \\ + 87 \\ \hline 212 \end{array}$$



4 Alaska AK STAR Grade 4 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key



Four focused 30-question missions for Grade 4 math: number facts, fractions, measurement, data, area, shapes, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome, Alaska Math Explorer!

Four steady rounds on the Last Frontier math route

This book gives you four full Grade 4 practice tests for AK STAR. Each round uses glacier paths, northern lights, and careful tracker thinking to keep practice memorable while you read carefully, choose a strategy, show work, and check the answer.

Alaska Practice Promise

I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

Read

Plan

Check

How to Use This Book

A ten-session routine for Alaska AK STAR review

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Treat each round like a stop on the Last Frontier math route.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Good rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.



What Is Inside?

Four tests, 120 questions, and a full AK STAR review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for reading carefully, choosing operations, and using models.
Tests 2–4	Skill-building rounds with fractions, measurement, area, data, and two-step problems.
Tests 2–4	Stamina rounds for mixed review, neat work, and flexible strategies.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Real test readiness means recognizing the skill even when the next question changes topic.



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For more practice
& answers

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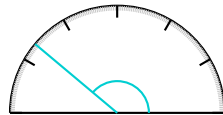
1) Ava's garden is a rectangle. It is 18 feet long and 12 feet wide. She wants to put a fence around it. How many feet of fencing does she need?

A. 30 ft

C. 216 ft

B. 60 ft

D. 120 ft



2)

What is the measure of the angle shown?

A. 130 degrees

C. 160 degrees

B. 150 degrees

D. 140 degrees

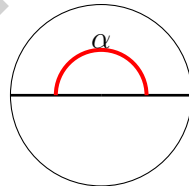
3) Which list orders the fractions correctly from least to greatest?

A. $\frac{3}{12}, \frac{5}{12}, \frac{7}{12}$

C. $\frac{3}{12}, \frac{7}{12}, \frac{5}{12}$

B. $\frac{7}{12}, \frac{5}{12}, \frac{3}{12}$

D. $\frac{5}{12}, \frac{3}{12}, \frac{7}{12}$



4)

The angle α shown above represents what fraction of a full turn?

A. $\frac{1}{4}$

C. $\frac{1}{2}$

B. $\frac{1}{3}$

D. $\frac{2}{3}$



5) Which choice shows the correct long division answer for $1,953 \div 3$?

A. 651

C. 641

B. 631

D. 661

6) A bar model shows 4 equal bars representing containers of milk, each holding 6 liters. How many liters in total?



A. 10 L

C. 24 L

B. 16 L

D. 30 L

7) A regular hexagon (6-sided polygon) has how many lines of symmetry?

A. 3

C. 6

B. 4

D. 8



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8) Which area model shows 23×14 ?

A.

20	3
10	4

B.

20	4
10	4

C.

20	3
10	6

D.

20	3
10	5

9) What is $8,432 - 3,657$?

A. 4,225

C. 5,225

B. 5,775

D. 4,775

10) Ava made a necklace. First she used $1\frac{4}{5}$ meters of string. Then she used $2\frac{1}{5}$ more meters. What is the total length?

A. $3\frac{4}{5}$ meters

C. 4 meters

B. $3\frac{3}{5}$ meters

D. $2\frac{5}{5}$ meters



1) Which expression equals $\frac{7}{10}$?

A. $3 \times \frac{1}{10}$

B. $7 \times \frac{1}{10}$

C. $10 \times \frac{1}{7}$

D. $\frac{1}{7} \times \frac{1}{10}$

2) A four-digit number has 9 in the thousands place and 2 in the tens place. The hundreds and ones digits are unknown. What is the minimum value this number could have?

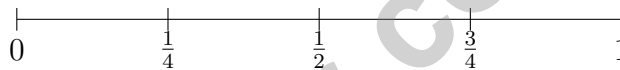
A. 9,220

B. 9,200

C. 9,002

D. 9,020

3) On the number line, which fraction is between $\frac{1}{4}$ and $\frac{3}{4}$?



A. $\frac{1}{4}$

B. $\frac{1}{2}$

C. $\frac{3}{4}$

D. 1

4) How many degrees does a right angle measure?

A. 45 degrees

B. 90 degrees

C. 120 degrees

D. 180 degrees

5) Which is true?

A. $0.5 > \frac{6}{10}$

B. $0.5 < \frac{4}{10}$

C. $0.5 = \frac{5}{10}$

D. $0.5 = \frac{5}{100}$



6) What is $7 \times \frac{1}{10}$?

A. $\frac{7}{10}$

B. $\frac{10}{7}$

C. $\frac{1}{70}$

D. $\frac{7}{100}$

7) What is $\frac{4}{10}$ as a decimal?

A. 0.04

B. 0.4

C. 4.0

D. 0.44

8) Sam had $2\frac{2}{4}$ meters of string. He used $1\frac{1}{4}$ meters for a project. How much string does he have left?

A. $1\frac{3}{4}$

B. $1\frac{1}{4}$

C. $2\frac{1}{4}$

D. $3\frac{3}{4}$

9) A running path is 4 kilometers long. How many meters is this?

A. 40

B. 400

C. 4,000

D. 40,000

10) A garden is divided into 5 equal rows. Plants are in 3 rows. Write the fraction of the garden with plants as a sum of unit fractions.

A. $\frac{3}{5}$

B. $\frac{1}{3} + \frac{1}{3} + \frac{1}{3}$

C. $\frac{2}{5}$

D. $\frac{1}{5} + \frac{1}{5} + \frac{1}{5}$

11) A pencil is $\frac{2}{5}$ decimeter long. What is the total length of 5 pencils?

A. $\frac{2}{25}$ decimeter

B. $\frac{10}{5}$ decimeters (or 2 decimeters)

C. $\frac{7}{5}$ decimeters

D. $\frac{10}{25}$ decimeter



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1) A growing pattern of rectangles shows:



Figure 1



Figure 2



Figure 3

How many unit squares are in Figure 5?

A. 8

C. 12

B. 14

D. 10

2) Ava's eraser costs \$0.32. Which fraction shows this price?

A. $\frac{32}{10}$

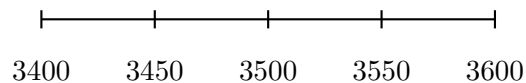
C. $\frac{32}{100}$

B. $\frac{3}{2}$

D. $\frac{32}{1000}$

3) Multiply 7×314 using the standard algorithm or partial products.

4) Using the number line, which number just below 3,500 rounds to 3,500 when rounded to the nearest hundred?



A. 3,449

C. 3,500

B. 3,551

D. 3,450



Practice Test Answer Keys

How to use this section with a Grade 4 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- Choice B is correct.** (4.MD.3) Fencing needed = $2(18) + 2(12) = 36 + 24 = 60$ ft.
- Choice D is correct.** (4.MD.8) The ray points to the 140° mark. At this measure, the angle is wider than a right angle but not yet flat, so it's obtuse. The answer is **140** degrees.
- Choice A is correct.** (4.NF.1) All fractions have denominator 12, so compare numerators: $3 < 5 < 7$. The order from least to greatest is $\frac{3}{12}, \frac{5}{12}, \frac{7}{12}$.
- Choice C is correct.** (4.MD.7) The shaded arc stretches across a straight line (from one side of the circle to the other), which is $\frac{1}{2}$ of a full turn or 180° .
- Choice A is correct.** (4.NBT.6) Use long division: $1 \div 3 = 0$ r1, bring down the 9 to get $19 \div 3 = 6$ r1, bring down the 5 to get $15 \div 3 = 5$, bring down the 3 to get $3 \div 3 = 1$. The answer is **651**.
- Choice C is correct.** (4.MD.2) The bar model shows 4 containers, each holding 6 liters. Multiply: $4 \times 6 = 24$ liters. The total is **24** liters.
- Choice C is correct.** (4.G.3) A regular hexagon (6 equal sides) is perfectly balanced in six ways. Lines can pass through opposite corners, or through the middle of opposite sides—each creates matching halves. The answer is **6** lines of symmetry.
- Choice A is correct.** (4.NBT.5) An area model splits both factors: $23 = 20 + 3$ (across) and $14 = 10 + 4$ (down). Choice A shows these parts correctly.
- Choice D is correct.** (4.NBT.4) Subtract column by column, regrouping as needed. Starting from the ones: we need to regroup the tens and higher places to complete the subtraction. The answer is **4,775**.
- Choice C is correct.** (4.NF.3) Add the wholes: $1 + 2 = 3$. Add the fractions: $\frac{4}{5} + \frac{1}{5} = \frac{5}{5} = 1$. Combine: $3 + 1 = 4$ meters.
- Choice A is correct.** (4.MD.9) To find the missing part, subtract what you know from the total: $80^\circ - 32^\circ = 48^\circ$.
- Choice D is correct.** (4.OA.3) Three steps! Step 1: deer total: $6 \times 12 = 72$. Step 2: rabbit total: $7 \times 12 = 84$. Step 3: add for grand total: $72 + 84 = 156$ animals.
- Choice C is correct.** (4.G.2) A trapezoid has exactly one pair of parallel sides. The green arrows in the figure mark this single pair of parallel sides, confirming the figure is a trapezoid. The answer is **C**.
- Choice D is correct.** (4.OA.2) "2 times as many" is a multiplication clue. Noah's sister has 2 groups of 7 crayons: $2 \times 7 = 14$ crayons.
- The correct answer is $\frac{18}{6}$.** (4.NF.4) Lining up 9 tiles, each $\frac{2}{6}$ meter long, gives us $9 \times \frac{2}{6} = \frac{18}{6} = 3$ meters.
- The correct answer is A, C.** (4.NF.4) A counts by halves: $\frac{2}{2} = 2 \times \frac{1}{2}$ checkmark. C counts by halves: $\frac{3}{2} = 3 \times \frac{1}{2}$ checkmark. The others don't fit.
- Choice D is correct.** (4.NBT.2) Ten-thousands: $5 \rightarrow 50,000$; thousands: $2 \rightarrow 2,000$; tens: $4 \rightarrow 40$; ones: $7 \rightarrow 7$ ✓
- Choice A is correct.** (4.NF.3) The bar shows all 4 parts shaded (light blue). The dark part ($\frac{1}{4}$) is removed. What's left: $4 - 1 = 3$ fourths, or $\frac{3}{4}$.
- Choice B is correct.** (4.NF.5) 0.5 represents half. The number line goes from 0 to 1, so 0.5 sits exactly in the middle at mark B.
- Choice A is correct.** (4.NF.4) We take 4 copies of $\frac{1}{3}$. Multiply: $4 \times \frac{1}{3} = \frac{4 \times 1}{3} = \frac{4}{3} = 1\frac{1}{3}$. The answer is **1 $\frac{1}{3}$** .
- The correct answer is 270.** (4.NBT.1) Step 1: Hundreds-place 3 has value 300. Step 2: Tens-place 3 has value 30. Step 3: Subtract: $300 - 30 = 270$. ✓
- The correct answer is 45.** (4.G.1) Subtract to find how much less: $90 - 45 = 45$.
- Choice A is correct.** (4.NF.3) The rectangle has 8 equal columns, and 5 are painted red. So $\frac{5}{8}$ is red, which is $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ —five unit fractions.
- Choice A is correct.** (4.NF.3) One whole ($\frac{4}{4}$) as unit fractions means four pieces of $\frac{1}{4}$: $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4}$ ✓.
- Choice B is correct.** (4.MD.1) Since 1 yard = 3 feet, divide: $50 \div 3 = 16$ remainder 2. The answer is **16** whole yards.
- Choice C is correct.** (4.MD.7) An angle can be named in reverse order, but the vertex must stay in the middle. Since M is the vertex, $\angle NMO$ and $\angle OMN$ name the same angle.



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Star Player Pep Talk

Hi, Star Player!

◇ 4 practice tests. Every one of them was a chance to grow. You took every chance. That's why you're a math star today! ◇

★ **Star players know:** confidence comes from practice. You can't fake it. You build it. You built yours over 4 tests. It's real now! ★

Star Player Stats

- **Practice:** OFF THE CHARTS!
- **Skills:** BROAD! You can do many problem types.
- **Toughness:** HIGH! You don't quit on hard problems.
- **Game Plan:** READY! You know your strategies.

Star tip: on test day, take it one play at a time. One problem. Then the next. You will earn your stars!

If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Coach

PRACTICE TODAY, SUCCEED TOMORROW!

This **Grade 4 Math Practice Tests** book is the perfect tool to help students build strong math skills, master key concepts, and gain the confidence they need to excel.

With 4 full-length practice tests, a variety of question types, and detailed answer explanations, students get the review and practice they need to strengthen problem-solving skills and achieve their best.

Perfect for classroom use, homework, test preparation, and extra practice at home.

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- ✓ Homework & Review
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- ✓ Test Preparation
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- ✓ Confidence Building

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Prepare for Success

Build the confidence needed to do your best on test day.

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- ✓ Multiplication & Division
- ✓ Fractions & Decimals
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- ✓ Perimeter & Area
- ✓ Patterns & Algebraic Thinking
- ✓ Word Problems
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