

7

Minnesota

MCA III

Grade 3 MATH

PRACTICE TESTS

Standards-Aligned Practice with
Review, Answer Keys, and Explanations



7 Full-Length
Practice Tests



Standards-Aligned
Math Practice



Detailed Answer Keys
and Explanations



Build Confidence.
Achieve Success.

PREPARE
PRACTICE
SUCCEED



$$\begin{array}{r} 248 \\ + 157 \\ \hline 405 \end{array}$$

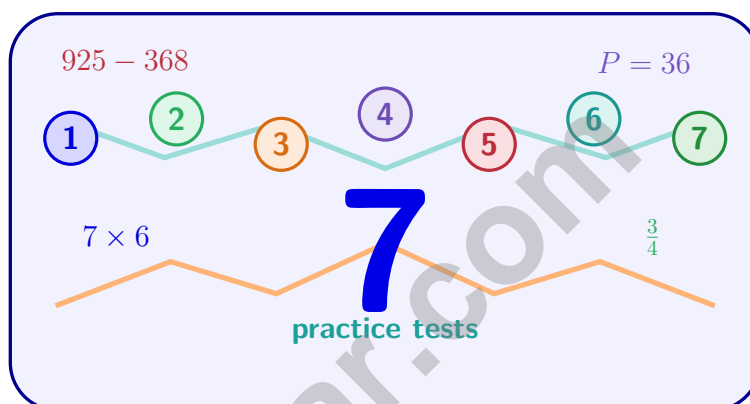


$$4 \times 6 = 24$$

$$2 + 3 = 5$$

7 Minnesota MCA-III Grade 3 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Seven complete 30-question practice trails for Grade 3 math:
operations, fractions, measurement, data, area, shapes, answer keys,
and clear explanations for every item.

Jay Daie and Reza Nazari



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Welcome to the Seven Math Trails

Seven full tests, seven fresh chances, and one braver Grade 3 thinker



Read the trail. Mark the clues. Solve with care.

To the Grade 3 Math Trail Leader

This book gives you seven complete practice trails for the Minnesota MCA-III. Each trail is a full 30-question test, so students can practice accuracy, stamina, and clear explanations over time.

Minnesota has lake maps, river trails, snowy parks, northern lights, and calm classroom focus, where careful steps matter. Strong math follows that same path: notice the question, choose a tool, show the work, and stay accurate even when the work gets long.

Scout

Find what the problem is asking before you calculate.

Solve

Pick an equation, model, array, graph, or number line.

Prove

Check the answer and explain the thinking clearly.

Seven-trail promise: I will work with patience, use my scratch space wisely, and let every correction make my next test stronger.

How to Use This Book

A seven-trail routine for steady Grade 3 growth

Use one practice trail at a time. The goal is not to rush through more pages. The goal is to finish, check, repair, and bring a stronger habit to the next test. For Minnesota students, each trail moves through lake maps, river trails, snowy parks, northern lights, and calm classroom focus: steady, alert, and ready for the next clue.

1. **Preview the tools.** Skim the reference page before each test.
2. **Take one test.** Work steadily and mark problems that need another look.
3. **Check the key.** Use the compact answer boxes first.
4. **Study explanations.** Read missed items and lucky guesses.
5. **Redo three problems.** Rewrite the work cleanly without copying.
6. **Name one habit.** Choose a focus such as labels, facts, fractions, or checking.
7. **Start the next trail.** Bring that habit into the next full test.

Best review habit: A missed problem is a trail marker. It shows where to slow down, look again, and choose a better step.



What Is Inside?

Seven complete practice tests with review support

Part	What You Do	Why It Helps
Practice Tests 1–7	Solve seven different 30-question tests.	Build stamina and see Grade 3 skills mixed together.
Reference Materials	Review measurement and time facts before each test.	Keep common tools close without turning pages backward.
Answer Keys	Check each answer in compact boxes.	Find mistakes quickly without losing your place.
Explanations	Read why each answer works.	Turn missed items into a clear next step.
Standards Reference	See how Minnesota Grade 3 standards connect to practice.	Understand the skills behind the questions.

Each test has 26 multiple-choice questions, 1 select-all question, and 3 open-ended questions. This gives students practice with quick decisions, careful reading, and short written math answers for the Minnesota MCA-III path.

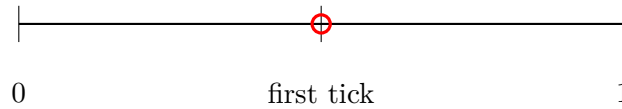


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& answers

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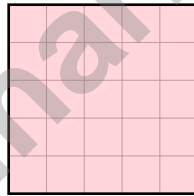
★ Practice Test 1	_____	14
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- 1) A number line shows 0 and 1 divided in half (into 2 equal parts). The first tick mark is at which fraction?



- A. $\frac{1}{2}$ (the unit fraction) C. $\frac{2}{2}$ (the whole)
 B. $\frac{1}{3}$ (wrong denominator) D. $\frac{1}{4}$ (too many parts)
- 2) Subtract $604 - 327$ using the standard algorithm.

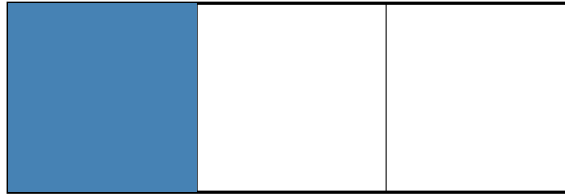
- 3) This rectangle on a grid has how many unit squares?



- A. 20 sq units C. 30 sq units
 B. 25 sq units D. 35 sq units

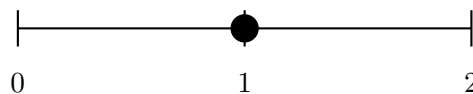


- 4) Look at the rectangle with 3 equal parts. One part is shaded blue.



What fraction is shaded?

- A. $\frac{1}{2}$ C. $\frac{2}{3}$
 B. $\frac{1}{3}$ D. $\frac{3}{1}$
- 5) A bar graph shows a scale where each unit represents 2 items. If we want to show 12 items, how many units tall should the bar be?
- A. 2 units C. 6 units
 B. 4 units D. 12 units
- 6) Sam reads for 26 minutes starting at 6 : 19 PM. What time does Sam finish reading?
- A. 6 : 35 PM C. 6 : 45 PM
 B. 6 : 40 PM D. 6 : 50 PM
- 7) A number line shows 0 to 2 divided into 2 equal parts. What fraction is at the middle tick mark?



- A. $\frac{1}{2}$ C. $\frac{3}{2}$
 B. 1 D. $\frac{1}{4}$



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8) Which fraction is equivalent to $\frac{1}{2}$?

- A. $\frac{1}{4}$
 B. $\frac{2}{4}$

- C. $\frac{2}{3}$
 D. $\frac{1}{3}$

9) A multiplication table row for 8 shows: 8, 16, 24, 32, 40.

What is the rule for this pattern?

- A. Add 8 each time (multiply 8 by 1, 2, 3, 4, 5)
 B. Double each number
 C. Add the position number
 D. Subtract 8 each time

10) Noah has $\frac{4}{1}$ pencils. How many whole pencils?

- A. 1
 B. 2

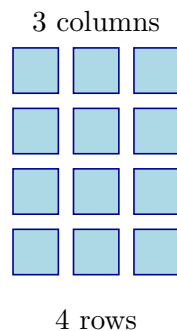
- C. 4
 D. $\frac{1}{4}$

11) Which pair of dimensions creates a rectangle with area 8 unit squares?

- A. 2 by 3
 B. 2 by 4

- C. 2 by 2
 D. 3 by 3

12) Use the array. Which division sentence does it show?



- A. $12 \div 6 = 2$
 B. $12 \div 12 = 1$

- C. $12 \div 2 = 6$
 D. $12 \div 4 = 3$



1) Ava has 72 stickers. She puts them in albums with 8 stickers on each page. How many pages does she fill?

A. 8 pages

C. 10 pages

B. 12 pages

D. 9 pages

2) Which equation matches the tiling shown by a rectangle with one line cutting it vertically into two parts?

A. $7 \times (3 + 2) = (7 \times 3) + (7 \times 2)$

C. $7 + 3 + 2 = 12$

B. $3 \times 2 = 6$

D. $(3 \times 7) + (2 \times 7) = 35 + 14$

3) A ribbon is marked on a number line from 0 to 1 with 8 equal spaces. Mia marks the first space. What fraction of the ribbon is marked?



A. $\frac{1}{8}$

C. $\frac{1}{9}$

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

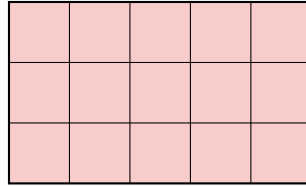
D. $\frac{2}{8}$

4) Find $\frac{9}{3}$.



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5)



Count all unit squares in this grid. What is the total?

- A. 12 unit squares C. 14 unit squares
 B. 13 unit squares D. 15 unit squares
- 6) Mia drinks juice from four bottles. Each bottle holds 250 mL. How many milliliters does she drink in total?
- A. 250 mL C. 1000 mL
 B. 750 mL D. 2000 mL
- 7) On a grid, a rectangle covers 6 rows and 7 columns of unit squares.

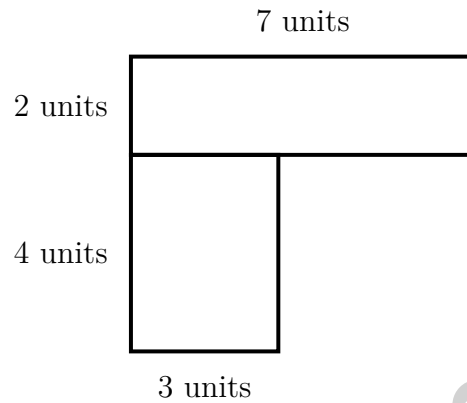


What is the area?

- A. 26 sq units C. 42 sq units
 B. 36 sq units D. 48 sq units



- 1) An L-shaped kitchen floor plan shows two rectangular sections. Upper: 7 units by 2 units. Lower left: 3 units by 4 units. What is the total floor area?



- A. 26 sq units C. 12 sq units
 B. 14 sq units D. 56 sq units
- 2) Round 614 to the nearest 100. What is the answer?

- 3) Look at this pattern: 6, 12, 18, 24, 30, 36.
What is the next number?

- A. 40 C. 48
 B. 50 D. 42



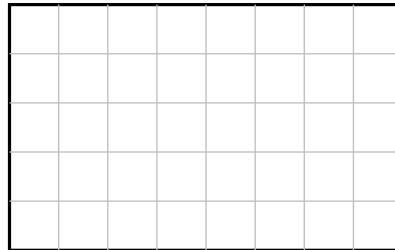
4) Which fraction is equivalent to $\frac{2}{4}$?

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

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

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

D. $\frac{2}{8}$



5 units

5) 8 units

Count the unit squares. What is the area of the rectangle?

A. 40 sq units

C. 13 sq units

B. 32 sq units

D. 64 sq units

6) Noah has 3 groups of stickers. Each group has 4 red and 3 blue stickers. Which expanded equation finds the total?

A. $3 \times (4 + 3) = 21$

C. $3 + 4 + 3 = 10$

B. $3 \times 4 = 12$

D. $3 \times 4 + 3 \times 3 = 21$

7) Two rectangles have the same area of 24 square units. Rectangle A is 6 units by 4 units. Which dimensions could Rectangle B have?

A. 8 units by 3 units

C. 6 units by 5 units

B. 5 units by 5 units

D. 7 units by 3 units



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Practice Test Answer Keys

How to use this section with a Grade 3 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

- 1) **Choice A is correct.** **(3.1.3.1)** Divided in half means 2 equal parts. The first tick is at the unit fraction $\frac{1}{2}$.
- 2) **The correct answer is 277.** **(3.1.2.1)** Regroup 604 as 5 hundreds, 9 tens, and 14 ones. Ones: $14 - 7 = 7$. Tens: $9 - 2 = 7$. Hundreds: $5 - 3 = 2$. Correct: 277.
- 3) **Choice B is correct.** **(3.3.2.1)** This is a square: $5 \times 5 = 25$ unit squares.
- 4) **Choice B is correct.** **(3.1.3.2)** The rectangle has 3 equal parts, and 1 part is shaded. The unit fraction is $\frac{1}{3}$ (one-third).
- 5) **Choice C is correct.** **(3.4.1.1)** Divide the total by the scale: $12 \div 2 = 6$ units tall.
- 6) **Choice C is correct.** **(3.2.1.1)** $6 : 19 + 26 \text{ min} = 6 : 45 \text{ PM}$.
- 7) **Choice B is correct.** **(3.1.3.1)** On a number line from 0 to 2, the middle tick mark is at 1, which is halfway between 0 and 2.
- 8) **Choice B is correct.** **(3.1.3.3)** $\frac{1}{2}$ and $\frac{2}{4}$ represent the same amount. Both show half of a whole.
- 9) **Choice A is correct.** **(3.2.1.1)** $8 \rightarrow 16$ is $+8$; $16 \rightarrow 24$ is $+8$; $24 \rightarrow 32$ is $+8$. The row for 8 shows multiples of 8: $8 \times 1 = 8$, $8 \times 2 = 16$, $8 \times 3 = 24$, etc.
- 10) **Choice C is correct.** **(3.1.3.1)** $\frac{4}{1} = 4$. Any number over 1 equals that number.
- 11) **Choice B is correct.** **(3.1.3.3)** $2 \times 4 = 8$ unit squares. Option A is 6, C is 4, D is 9.
- 12) **Choice D is correct.** **(3.4.1.1)** The array shows 12 items arranged in 4 rows with 3 items in each row. That division sentence is $12 \div 4 = 3$.
- 13) **Choice B is correct.** **(3.1.2.3)** Area is the space INSIDE a shape. Maria must count or multiply to find all the unit squares, not just the border. $5 \times 3 = 15$ square units.
- 14) **Choice D is correct.** **(3.1.2.2)** Step 1: Pages per chapter: $64 \div 8 = 8$ pages. Step 2: Pages read: $3 \times 8 = 24$ pages.
- 15) **Choices A and C are correct.** **(3.1.2.5)** $6 \times 40 = 240$ and $4 \times 60 = 240$. Choice B is $8 \times 20 = 160$, choice D is $3 \times 70 = 210$, and choice E is $6 \times 30 = 180$.
- 16) **Choice C is correct.** **(3.2.2.1)** Area = length \times width = $8 \times 4 = 32$ square meters.
- 17) **The correct answer is $\frac{2}{3}$.** **(3.1.3.1)** Thirds are larger pieces than fourths.
- 18) **Choice A is correct.** **(3.1.1.4)** The ones digit is 4. Since $4 < 5$, round down: 254 rounds to 250.
- 19) **Choice D is correct.** **(3.1.3.1)** The picture shows 4 columns with 3 circles in each column. So $4 \times 3 = 12$ circles.
- 20) **Choice D is correct.** **(3.1.2.3)** Multiply: 8 rows \times 4 columns = 32 soldiers.
- 21) **Choice A is correct.** **(3.3.1.1)** In a square, all 4 sides are the same length. So the green sides and blue sides are all equal to each other.
- 22) **Choice C is correct.** **(3.4.1.1)** Count the rows: 6 rows. Count down: 6 tiles in each row. Total: $6 + 6 + 6 + 6 + 6 + 6 = 36$ square tiles.
- 23) **Choice D is correct.** **(3.2.2.1)** The total number of stickers is unknown. Since the stickers are shared equally among 3 friends and each friend gets 6, the equation is $\square \div 3 = 6$.
- 24) **The correct answer is 1.** **(3.1.3.1)** $\frac{2}{4} = \frac{1}{2}$, so she ate 1 half.
- 25) **Choice C is correct.** **(3.4.1.1)** Less than 4 ounces includes 3 and $3\frac{1}{2}$: that is $2 + 4 = 6$ rocks.
- 26) **Choice A is correct.** **(3.1.2.1)** 5 g is the smallest (lightest) mass.
- 27) **Choice A is correct.** **(3.3.1.1)** Top rectangle: $6 \times 2 = 12$ sq units. Bottom rectangle: $4 \times 3 = 12$ sq units. Total: $12 + 12 = 24$ sq units.
- 28) **Choice A is correct.** **(3.2.2.2)** $20 \div 4 = \square$ means $\square \times 4 = 20$. Since $5 \times 4 = 20$, there are 5 stickers in each group. Option B (confuses divisor with quotient); Option D adds instead of divides.
- 29) **Choice B is correct.** **(3.1.2.3)** Rectangle A: $6 \times 3 = 18$ sq units. Rectangle B: $5 \times 4 = 20$ sq units. $20 > 18$, so B is larger.
- 30) **Choice A is correct.** **(3.1.3.1)** Both strips show the same amount shaded. $\frac{2}{4} = \frac{1}{2}$ because $\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$.



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Hi, Math Athlete!

◇ 7 practice tests done! That's serious training. Your math muscles are strong. You are in great shape for the big test. ◇

★ **Trainers know:** muscle memory is real. The more you practice, the more your brain knows what to do without thinking. You built that muscle memory! ★

Athlete Performance

- **Endurance:** TOP! You can finish a long test.
- **Strength:** STRONG! You handle hard problems.
- **Speed:** JUST RIGHT! You don't rush.
- **Recovery:** GOOD! You bounce back from tough questions.

Trainer tip: on test day, drink water, breathe deeply, and warm up with the easier questions first. Your training will carry you the rest of the way!

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

Jay Daie

Your Math Trainer

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PRACTICE TODAY. MASTER TOMORROW.

This book is designed to help **Grade 3** students strengthen their math skills through focused practice and real progress.

- ✓ 7 full-length practice tests
- ✓ Aligned to Grade 3 standards
- ✓ Build confidence and achieve success
- ✓ Review, answer keys, and explanations



EACH PRACTICE TEST INCLUDES:



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Questions



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Question
Types



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Math
Applications



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Progress
Tracking



Build Skills
and Boost
Confidence

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- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
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- ✓ Measurement & Data
- ✓ Number Patterns
- ✓ Word Problems
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