

7

Minnesota

MCA III

GRADE 5

MATHEMATICS

PRACTICE TESTS

✓
PRACTICE
PREPARE
SUCCEED

★★★

Comprehensive Standards-Aligned
Review for Strong Grade 5
Math Performance



$$\frac{3}{4} + \frac{2}{4} = \frac{5}{4}$$

$$2.4 + 1.6 = 4.0$$

$$A = \frac{bh}{2}$$



**7 FULL-LENGTH
PRACTICE TESTS**

Realistic style
questions



**STANDARDS-
ALIGNED**

Covers all Grade 5
standards



BUILD CONFIDENCE

Target weak areas
and improve
performance



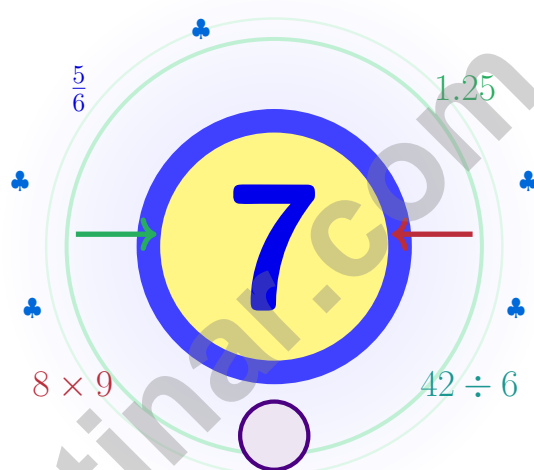
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. SUCCEED FOREVER. ★

7 Minnesota MCA-III Grade 5 Math Practice Tests

Seven steps, seven growth checks, one calm routine



Seven full tests, a concise review, and helpful support that turns Grade 5 practice in The Land of 10,000 Lakes into steady, confident growth from page one to the final check.

Jay Daie and Reza Nazari



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Welcome to the Practice Path, Minnesota

This book is here to help you practice, reflect, and rise across seven tests

Trail Briefing for Minnesota Grade 5 Math Crew

This practice book is your steady companion for seven tests, not a place to be perfect. Math practice is like canoeing the Boundary Waters – balanced strokes, patient eyes, and a calm trust in the route.

Use these seven tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up across seven rounds.

See

See the question fully before you start the math.

Plan

Pick a strategy that fits the numbers in front of you.

Build

Build the answer step by step, no shortcuts.

A strong habit for Minnesota mathematicians: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

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How to Use This Book

A simple routine that turns practice into progress

Step 1: Set Up

Pencil ready, distractions gone.
Spend a few minutes waking up your memory before the test begins.

Step 2: Work the Test

Take a full test like the real day.
Work in a calm spot and focus on careful thinking before speed.

Step 3: Look Back

Walk through your answers without rushing.
Circle missed questions and notice which topics keep showing up.

Step 4: Climb Higher

Pick one or two skills to sharpen next.
Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Minnesota Rhythm

Week 1	Take Test 1 and pick your first lake.
Week 2	Take Test 2 and slow down on word problems.
Week 3	Take Test 3 and lift fraction and decimal work.
Week 4	Take Test 4 and pay close attention to labels and units.
Week 5	Take Test 5 and compare your habits with your first test.
Week 6	Take Test 6 and practice staying calm during tricky questions.
Week 7	Take Test 7 with calm, careful, confident paddling.



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Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

Metric

1 kilogram (kg) = 1,000 grams (g)

1 gram (g) = 1,000 milligrams (mg)

TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



7) Simplify then multiply: $\frac{8}{12} \times \frac{3}{4}$. What is the result?

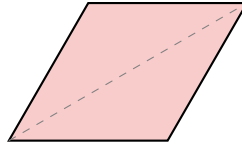
A. $\frac{24}{36}$

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

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

D. $\frac{5}{6}$

8) This figure has all four sides equal and is drawn like a diamond. What is the most specific name for this quadrilateral?



all sides equal

 A. Rectangle B. Rhombus C. Trapezoid D. Kite

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1) A rope is $\frac{5}{9}$ meters long. A shorter rope is $\frac{2}{9}$ meters. What is the total length of both ropes?

A. $\frac{3}{9}$ m

C. $\frac{7}{9}$ m

B. $\frac{5}{9}$ m

D. $\frac{9}{9}$ m

2) Which fraction or mixed number is the multiplicative identity (when multiplied by any number, gives that number)?

A. 2

C. 1

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

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

3) Find missing: $\frac{7}{10} - \square = \frac{1}{5}$

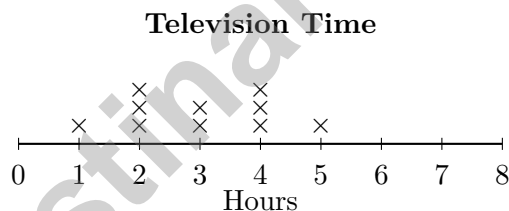
A. $\frac{3}{10}$

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

B. $\frac{6}{10}$

D. $\frac{5}{10}$

4) The line plot displays the time (in hours) spent watching television:



What is the least amount of television watched?

A. 1 hour

C. 3 hours

B. 2 hours

D. 4 hours

5) A dress requires $\frac{5}{8}$ yard of fabric. If you make 3 dresses, how much fabric do you need? Give the answer as a mixed number.

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

C. $\frac{8}{24}$ yard

B. $1\frac{7}{8}$ yard

D. $\frac{3}{8}$ yard



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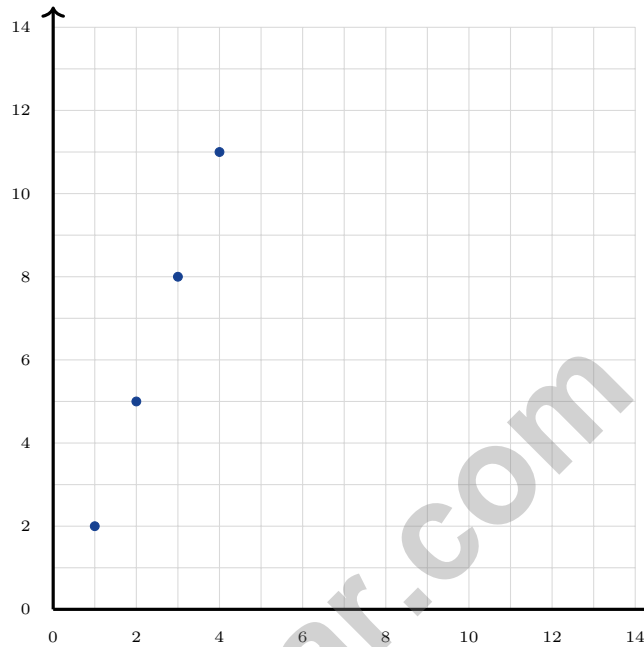
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- 1) A pattern rule states: "Start with 2 at position 1 and add 3 each step." Do the plotted points match?



- A. Points shown match
- B. All second coordinates are too large by 1
- C. All x -values are wrong
- D. The pattern does not grow by a constant amount
- 2) How many pounds are in 48 ounces? (1 pound = 16 ounces)
- A. 2 pounds
- B. 4 pounds
- C. 3 pounds
- D. 5 pounds
- 3) The calculated cost before rounding is \$27.655. Round to the nearest cent (hundredth) for the price tag.
- A. \$27.65
- B. \$28.00
- C. \$27.70
- D. \$27.66



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1) A pizza is cut into 8 slices. You eat $\frac{3}{8}$ of the pizza. How many slices do you eat?

A. 1 slice

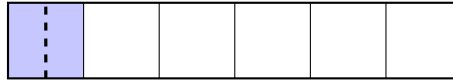
C. 4 slices

B. 2 slices

D. 3 slices

2) The model shows $\frac{1}{6}$ of a whole split into 2 equal parts. What fraction of the whole is each small part?

$\frac{1}{6}$ split into 2



1 whole split into 6 equal parts

A. $\frac{1}{12}$

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

B. $\frac{1}{6}$

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

3) Find: $10 \div \frac{1}{4}$.

Record your answer in the space provided.

4) Find the least common denominator of $\frac{2}{3}$ and $\frac{1}{4}$.

Record your answer in the space provided.



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** (5.1.3.4) Use total amount divided by the size of one piece. The equation is $8 \div \frac{1}{3} = n$.
- 2) **Choice A is correct.** (5.2.2.1) The left expression has 4 copies of both 25 and 6. The right expression has 4 copies of 25 but only one 6, so the left expression is greater.
- 3) **Choice C is correct.** (5.1.2.2) Dividing by a power of 10 shifts the value to a smaller place. $3,000 \div 10 = 300$ napkins per table. This confirms the answer.
- 4) **Choice A is correct.** (5.2.2.1) Use place value: $112 \times 4 = (100 \times 4) + (10 \times 4) + (2 \times 4) = 400 + 40 + 8 = 448$ seats.
- 5) **Choice C is correct.** (5.1.3.4) The denominator increased from 4 to 12 (multiply by 3). Multiply the numerator by 3: $3 \times 3 = 9$.
- 6) **Choice A is correct.** (5.1.1.4) Round: $1,456 \approx 1,500$ and $48 \approx 50$. So $1,500 \div 50 = 30$. Actual: $1,456 \div 48 = 30$ R16.
- 7) **Choice B is correct.** (5.1.2.2) Simplify $\frac{8}{12} = \frac{2}{3}$. Then $\frac{2}{3} \times \frac{3}{4} = \frac{6}{12} = \frac{1}{2}$.
- 8) **Choice B is correct.** (5.3.1.1) A rhombus is a quadrilateral with all four sides equal. This figure has that attribute and does not show four right angles, so the most specific name is rhombus.
- 9) **Choice B is correct.** (5.1.3.4) Point R is 8 units right and 5 units up from the origin, so the coordinates are (8, 5).
- 10) **Choice C is correct.** (5.4.1.2) $1 \text{ km} = 1,000 \text{ m}$. Multiply: $280 \times 1000 = 280,000 \text{ m}$.
- 11) **Choice B is correct.** (5.3.2.1) The triangle has two equal angle measures, 45 degrees and 45 degrees. The sides opposite those equal angles are equal, so two sides are equal.
- 12) **Choice C is correct.** (5.4.1.2) $8 \div \frac{1}{2} = 8 \times 2 = 16$.
- 13) **The correct answer is 9 ft.** (5.4.1.2) $3 \times 3 = 9$ feet. Each yard has 3 feet, so 3 yards has three groups of 3 feet.
- 14) **Choice D is correct.** (5.1.3.3) The tenths place is 5. The hundredths place is 4. Since $4 < 5$, keep 5. So 12.542 rounds to 12.5.
- 15) **Choice D is correct.** (5.2.2.1) First translate “7 times 9” as 7×9 . Then “5 more than” means add 5 to that product.
- 16) **Choice D is correct.** (5.3.2.4) $V = 9 \times 6 \times 7 = 54 \times 7 = 378 \text{ cm}^3$.
- 17) **Choice B is correct.** (5.2.1.2) In an ordered pair (x, y) , the y represents the vertical distance (how far up) from the origin.
- 18) **Choice A is correct.** (5.3.2.2) Use the rectangular-prism volume formula: $9 \times 7 \times 7 = 441$. So the volume is 441 cubic centimeters.
- 19) **Choice A is correct.** (5.2.2.1) First simplify inside the parentheses: $3 + 5 = 8$. Then multiply, $2 \times 8 = 16$, and subtract from 24 to get 8.
- 20) **Choices A, B are correct.** (5.2.1.2) The 5th term is 16, and every pair of consecutive terms differs by 3. C should be 31, and D misnames the rule because this is an additive pattern.
- 21) **Choice C is correct.** (5.1.3.4) To be in the pattern, the y -value must be double the x -value. For (7, 13), $2 \times 7 = 14$, not 13, so that pair does not fit.
- 22) **Choice B is correct.** (5.1.2.3) The area model breaks into four parts: $3 \times 2 = 6$, $3 \times 0.5 = 1.5$, $0.2 \times 2 = 0.4$, $0.2 \times 0.5 = 0.1$. Total: $6 + 1.5 + 0.4 + 0.1 = 8$.
- 23) **Choice C is correct.** (5.3.2.3) Volume measures the amount of space inside a solid figure, so it is measured in cubic units such as cubic inches.
- 24) **The correct answer is 5.75.** (5.1.3.4) Write $9.40 - 3.65$. Regroup 1 tenth as 10 hundredths, then subtract by place value: $9.40 - 3.65 = 5.75$.
- 25) **The correct answer is 0.85.** (5.1.2.2) Move the decimal point three places left: $850 \rightarrow 0.85$.
- 26) **Choice D is correct.** (5.1.3.4) LCD is 12. $\frac{2}{3} = \frac{8}{12}$ and $\frac{3}{4} = \frac{9}{12}$. Since $8 < 9$, $\frac{2}{3} < \frac{3}{4}$.
- 27) **Choice C is correct.** (5.1.2.1) 4.05 has a 0 in the tenths place and a 5 in the hundredths place, so it reads as “four and five hundredths”.
- 28) **Choice B is correct.** (5.2.2.1) Move outward through the grouping symbols: $5 - 2 = 3$, then $[4 \times 3] = 12$, then $\{3 + 12\} = 15$. Finally, $2 \times 15 = 30$.
- 29) **Choice A is correct.** (5.1.3.3) Add: $12.5 + 8.75 + 6.25 = 27.5$ meters.
- 30) **Choice B is correct.** (5.3.2.3) To find how many unit cubes fit in the prism, we multiply the dimensions: $3 \times 2 \times 2 = 12$ unit cubes.



Fractions and Decimals Confidence

Dear Student,

★ Fractions and decimals can feel confusing at first, but practice makes them clearer. Seven tests gave you many chances to compare, add, subtract, and understand parts of a whole. ★

◇ **Great strategy:** use models in your mind. Think of fractions as parts of a pizza, a bar, or a number line. That picture helps your math stay accurate. ◇

Fraction Tools

- **Same denominator:** add/subtract the numerators.
- **Number line:** place fractions to compare them.
- **Benchmark:** use 0, $\frac{1}{2}$, and 1 to estimate.
- **Decimals:** think in tenths and hundredths.

You've earned confidence by practicing again and again. Keep using these tools.

Email me at reza@testinar.com.

Reza Nazari & Jay Daie

Your Math Coaches (Fractions Made Clear)

PRACTICE TODAY. PERFORM TOMORROW.

Success in math starts with practice! This book provides the **practice, confidence, and skills** your child needs to excel on the Grade 5 Math test and beyond.

KEY BENEFITS:



TARGETED PRACTICE

Focus on the most important Grade 5 math skills.



STANDARD-ALIGNED

All tests align with state standards for Grade 5.



BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



ACHIEVE SUCCESS

Develop strong test-taking skills and achieve your best score!

PERFECT FOR:

✓ Classroom Practice

✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED



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Give your child the tools they need to succeed in math and in life!



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FOR SUCCESS

Proven practice for real results.



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YOUR CHILD

Every step of the way.