7 Iowa ISASP GRADE 5 MATHEMATICS PRACTICE TESTS

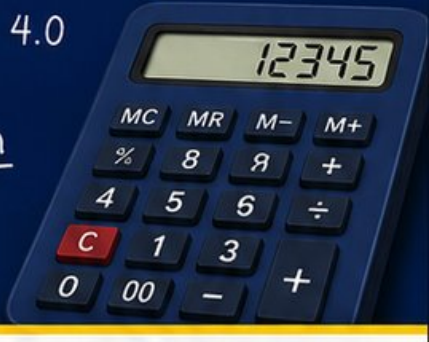
PRACTICE PREPARE SUCCEED

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

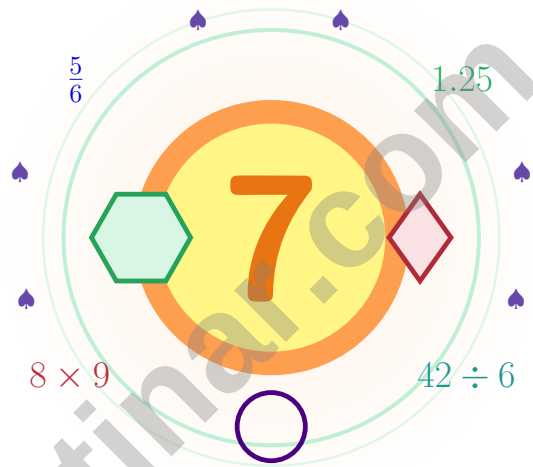
BUILD CONFIDENCE
Target weak areas and improve performance

ACHIEVE SUCCESS
Develop skills, stay prepared, excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. SUCCEED FOREVER. ★

7 Iowa ISASP Grade 5 Math Practice Tests

A seven-step expedition for curious Grade 5 thinkers



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

Jay Daie and Reza Nazari

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Hello, Iowa – Seven Tests, Steady Growth

Seven chances to read carefully, solve smartly, and grow stronger

To Iowa Students Who Love a Puzzle

This practice book is your steady companion for seven tests, not a place to be perfect. Strong math practice grows the way a cornfield grows – in tidy rows, with patience, and one steady season at a time.

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.

Read

Read every word twice and underline what is asked.

Solve

Choose the cleanest method and show your steps.

Reflect

Look back to find what worked and what to fix.

A strong habit for Iowa 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.

How This Book Wants to Help

A simple routine that turns practice into progress

Step 1: Power Up

Sharpen your math brain with the quick review.

Spend a few minutes waking up your memory before the test begins.

Step 2: Trail Run

Take a full practice test in a quiet spot.

Work in a calm spot and focus on careful thinking before speed.

Step 3: Debrief

Score honestly and circle missed questions.

Circle missed questions and notice which topics keep showing up.

Step 4: Repair

Fix the missed work and lock the lesson in.

Read the explanation, repair the work, and bring that lesson into the next test.

A Good 7-Week Iowa Rhythm

Week 1	Take Test 1 and plant the first row carefully.
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 and harvest your habits with calm, careful work.

Table of Contents

Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
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1 minute (min) = 60 seconds (sec)	1 week = 7 days
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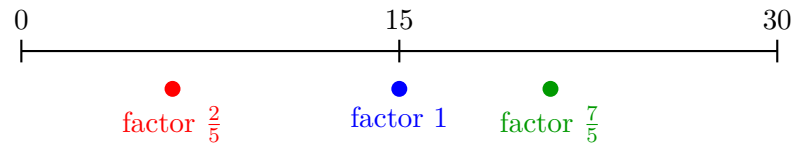
1) Order these products from smallest to largest: $15 \times \frac{2}{5}$, 15×1, $15 \times \frac{7}{5}$.



☐ A. $\frac{2}{5}$, 1, $\frac{7}{5}$
☐ B. $\frac{7}{5}$, 1, $\frac{2}{5}$
☐ C. 1, $\frac{2}{5}$, $\frac{7}{5}$
☐ D. All equal

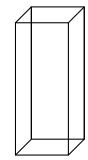
2) Which expression equals 24×15?

☐ A. $(24 + 15) \times 2$
☐ B. $24 + 15$
☐ C. $24 - 15$
☐ D. 15×24

3) A water bottle holds $\frac{2}{3}$ liter. How much water is in 5 bottles?

☐ A. $\frac{10}{3}$ liters or $3\frac{1}{3}$ liters
☐ B. $\frac{2}{15}$ liters
☐ C. $\frac{10}{15}$ liters
☐ D. $\frac{7}{3}$ liters

4) A refrigerator is 2 feet wide, 3 feet deep, and 5 feet tall. What is its volume?



$2 \times 3 \times 5$ ft

☐ A. 10 cubic feet
☐ B. 15 cubic feet
☐ C. 25 cubic feet
☐ D. 30 cubic feet

5) A playground has two age groups with counts. Ages 5–7: 3, 6, 9, 12 children per day. Ages 8–10: 2, 4, 6, 8 children per day. Which (younger, older) pair is for day 2?

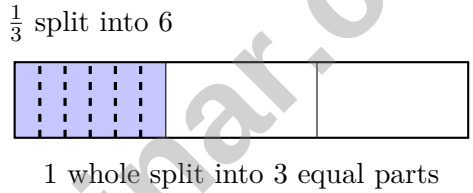
☐ A. (9, 6)
☐ B. (12, 8)
☐ C. (3, 2)
☐ D. (6, 4)

6) What number belongs in the blank so the equation is true?

$$(\square + 2) \times 3 = 15$$

☐ A. 2
☐ B. 3
☐ C. 5
☐ D. 6

7) The model shows $\frac{1}{3}$ of a whole split into 6 equal parts. What fraction of the whole is each small part?



☐ A. $\frac{1}{3}$
☐ B. $\frac{1}{6}$
☐ C. $\frac{1}{18}$
☐ D. $\frac{1}{9}$

8) A student says that in the number 2.894, the digit 4 is worth 0.4. What error did the student make?

☐ A. The student read the digit in the wrong place; 4 is in the thousandths place, so it is worth 0.004.
☐ B. The student forgot to subtract before reading place values.
☐ C. The student correctly identified the value.
☐ D. The student confused tenths and ones.

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1) Show the division pattern with a shift table:

Dividend	Divisor	Quotient
$4,500$	10	450
$4,500$	100	45
$4,500$	$1,000$	?

What is $4,500 \div 1,000$?

☐ A. 0.45
☐ B. 4.5
☐ C. 45
☐ D. 450

2) A shipping crate measures 10 centimeters long, 3 centimeters wide, and 4 centimeters tall. What is its volume?

☐ A. 120 cubic centimeters
☐ B. 30 cubic centimeters
☐ C. 40 cubic centimeters
☐ D. 12 cubic centimeters

3) Which decimal is closest to the sum $1.89 + 2.14$?

☐ A. 3.93
☐ B. 4.23
☐ C. 4.13
☐ D. 4.03

4) A school has 8 boxes of art supplies. Each project kit uses $\frac{1}{5}$ of a box. How many project kits can be made?

☐ A. 40 kits
☐ B. 20 kits
☐ C. 50 kits
☐ D. 100 kits

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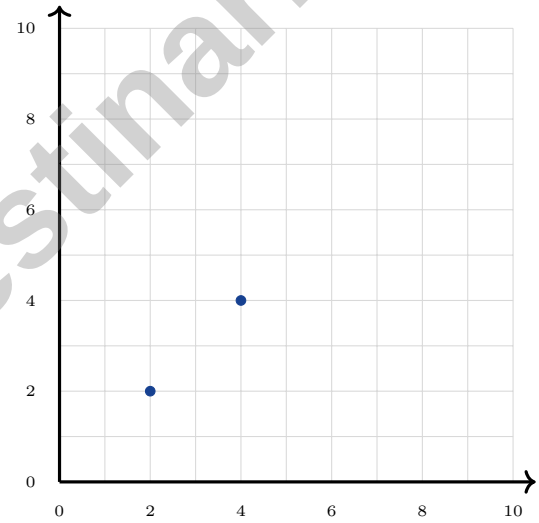
1) Multiply: $\frac{1}{5} \times \frac{2}{7}$

☐ A. $\frac{1}{7}$
☐ B. $\frac{3}{12}$
☐ C. $\frac{2}{12}$
☐ D. $\frac{2}{35}$

2) Pattern A: $0, 3, 6, 9, \ldots$. Pattern B: $0, 9, 18, 27, \ldots$. For the nonzero terms, each B value is how many times the matching A value?

Record your answer in the space provided.

3) A pattern starts with (2, 2). Each subsequent point adds 2 to both coordinates. What is the fourth point?



☐ A. (10, 10)
☐ B. (4, 4)
☐ C. (6, 6)
☐ D. (8, 8)

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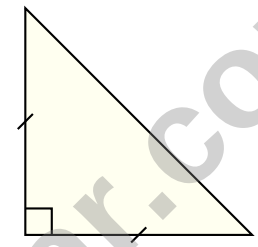
1) A rectangular prism has a volume of 120 cm^3, length 10 cm, and width 3 cm. What is its height?

☐ A. 5 cm
☐ C. 6 cm
☐ B. 4 cm
☐ D. 3 cm

2) Three measurements in millimeters: 45.506, 45.56, 45.065. Which is greatest?

☐ A. 45.506
☐ C. 45.065
☐ B. Equal
☐ D. 45.56

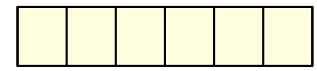
3) Look at the triangle. Which two classifications describe it?



☐ A. Acute and scalene
☐ C. Obtuse and isosceles
☐ B. Right and isosceles
☐ D. Equilateral and right

4) A landscaper has 6 yards of edging. Each flower bed uses $\frac{1}{4}$ yard of edging. How many flower beds can be edged?

6 yards; each bed uses $\frac{1}{4}$ yd



☐ A. 20 beds
☐ C. 30 beds
☐ B. 36 beds
☐ D. 24 beds

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.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice A is correct.** 5.NF.B.5 Since $\frac{2}{5} < 1 < \frac{7}{5}$, the products increase in that order.
2) **Choice D is correct.** 5.OA.A.2 Multiplication is commutative, so switching the order of the factors does not change the product.
3) **Choice A is correct.** 5.NF.B.4 $5 \times \frac{2}{3} = \frac{10}{3} = 3\frac{1}{3}$ liters.
4) **Choice D is correct.** 5.MD.C.3 $V = 2 \times 3 \times 5 = 30$ cubic feet.
5) **Choice D is correct.** 5.G.A.2 Day 2: Ages 5–7 count is 6, Ages 8–10 count is 4. Ordered pair is (6, 4).
6) **Choice B is correct.** 5.OA.A.1 Think backward from 15. Since something times 3 equals 15, the parentheses must equal 5. Then $\square + 2 = 5$, so the blank is 3.
7) **Choice C is correct.** 5.NF.B.3 Start with one unit fraction, $\frac{1}{3}$, and share it into 6 equal parts. Each part is $\frac{1}{3} \div 6 = \frac{1}{18}$ of the whole.
8) **Choice A is correct.** 5.NBT.A.1 In 2.894, the digits after the decimal are: 8 (tenths), 9 (hundredths), 4 (thousandths). The student mistook 4 for being in the tenths place.
9) **Choice B is correct.** 5.MD.A.1 1 m = 100 cm. Divide: $2000 \div 100 = 20$ m.
10) **Choice A is correct.** 5.NBT.B.6 Use nearby friendly numbers that are easy to divide: $572 \approx 600$ and $28 \approx 30$. Then $600 \div 30 = 20$, so the quotient is about 20.
11) **Choice C is correct.** 5.MD.B.2 When making the line plot, place one X for each measurement. $\frac{3}{4}$ appears 3 times, which is more than $\frac{1}{4}$ (1 time), $\frac{1}{2}$ (2 times), or 1 (2 times).
12) **Choice C is correct.** 5.MD.C.5 Total is 5 miles. Sum of known segments: $1.2 + 1.3 + 1.1 = 3.6$ miles. Final segment: $5 - 3.6 = 1.4$ miles.
13) **Choice A is correct.** 5.G.B.4 A square is the only quadrilateral that is both a rectangle (all 90° angles) and a rhombus (all sides equal).
14) **Choice B is correct.** 5.NF.B.4 $\frac{4}{9} \times \frac{3}{5} = \frac{12}{45} = \frac{4}{15}$ (divide by 3).
15) **Choice B is correct.** 5.MD.C.4 Volume $= 30 \times 25 \times 8 = 6000$ cubic feet.
16) **Choice C is correct.** 5.MD.A.1 Morning total: $28.7 + 19.3 = 48$ kg. Afternoon total: $31.4 + 22.6 = 54$ kg. Difference: $54 - 48 = 6$ kg.
17) **Choice D is correct.** 5.G.A.2 The x-coordinate (3) is hours worked, and the y-coordinate (90) is miles driven. This means 3 hours of work resulted in 90 miles driven.
18) **Choice D is correct.** 5.NBT.B.5 $13 \times 14 = 13 \times (10 + 4) = (13 \times 10) + (13 \times 4) = 130 + 52 = 182$. Alex's answer of 182 is correct.
19) **Choice A is correct.** 5.NF.B.7 $\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$.
20) **Choices A, B are correct.** 5.NF.A.1 C equals $1\frac{1}{12}$; D equals $1\frac{1}{2}$.
21) **Choice D is correct.** 5.NBT.A.3 "Two and thirty-seven hundredths" means 2 whole units and 37 hundredths: 2.37.
22) **The correct answer is 11.37.** 5.NBT.B.7 Write each to two decimals: $9.50 + 0.67 + 1.20 = 11.37$.
23) **Choice D is correct.** 5.NBT.A.2 $58 \times 100 = 5800$. Append two zeros to 58.
24) **The correct answer is 5.** 5.MD.C.5 Divide the volume by the base area: $60 \div 12 = 5$, so the height is 5 cm.
25) **Choice C is correct.** 5.OA.A.2 The expression $3 \times (5 + 2)$ means 3 copies of the sum $(5 + 2)$. That matches "3 times $(5 + 2)$."
26) **Choice B is correct.** 5.OA.A.1 Do the division and multiplication first: $72 \div 8 = 9$ and $3 \times 3 = 9$. Then finish left to right: $9 + 9 - 5 = 13$.
27) **Choice C is correct.** 5.NF.B.4 $5 \times 1\frac{1}{5} = 5 \times \frac{6}{5} = \frac{30}{5} = 6$.
28) **Choice D is correct.** 5.NBT.A.2 $12.50 \times 100 = 1250$ dollars (move decimal 2 places right).
29) **The correct answer is $\frac{2}{3}$.** 5.NF.A.2 $\frac{4}{5} = \frac{12}{15}$. Difference: $\frac{10}{15} = \frac{2}{3}$.
30) **Choice A is correct.** 5.NF.A.2 Common denominator is 35: $\frac{3}{5} = \frac{21}{35}$ and $\frac{2}{7} = \frac{10}{35}$. Since $21 > 10$, oil is more.

Dear Student,

⋆ Seven tests helped you practice managing time. Time skills include pacing, skipping and returning, and saving a few minutes to review. Those habits help you earn more points. ⋆

◇ **A simple rule:** don't get stuck too long on one question. Move forward and return later with a fresh mind. ◇

My Time Plan

- **Start steady:** read carefully, don't rush.
- **Mark hard ones:** circle and move on.
- **Return later:** try again with a clear head.
- **Review:** save time to check answers.

You practiced smart pacing across seven tests—use it on test day.

Email me at reza@testinar.com.

Reza Nazari & Jay Daie

Your Math Coaches (Use Your Time Wisely)

PRACTICE TODAY.
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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.

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Focus on the most important Grade 5 math skills.

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PRACTICE
PREPARE
SUCCEED
★★★

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DESIGNED FOR SUCCESS
Proven practice for real results.

SUPPORT YOUR CHILD
Every step of the way.