

# 10 COMPLETE

## Iowa

# ISASP

# GRADE 5

# MATH

# PRACTICE TESTS

Standards-Based Review with  
Mixed Practice and Detailed Answer Key



### 10 Complete Practice Tests

Build confidence and test readiness



### Standards-Based Review

Covers key Grade 5 math standards



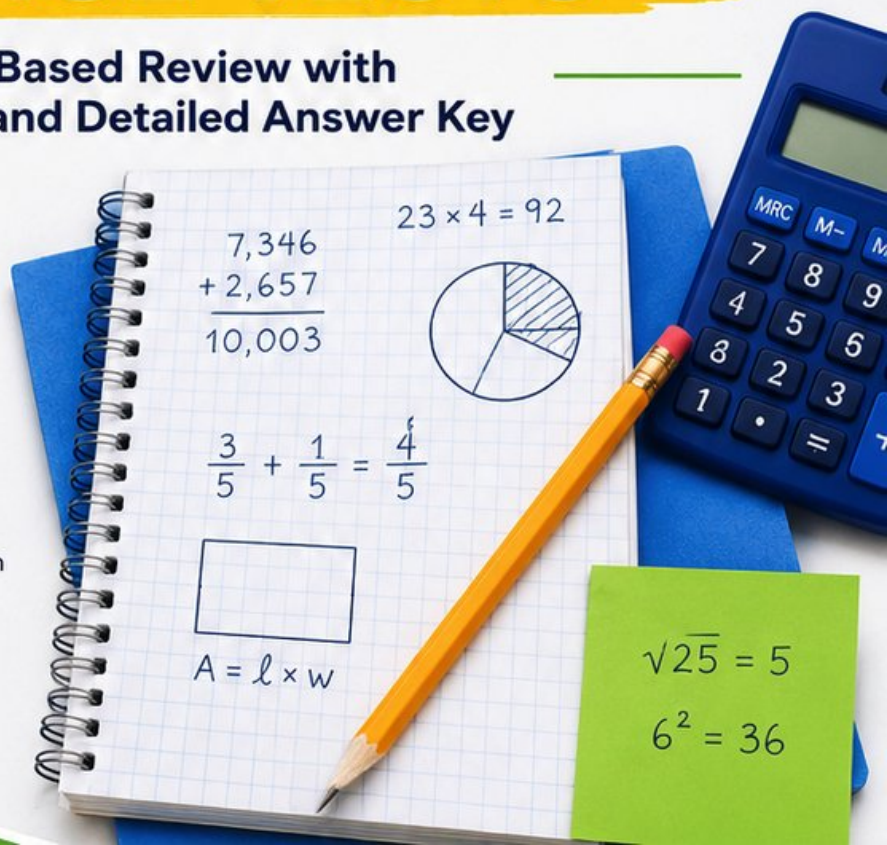
### Mixed Practice

Variety of question types to strengthen skills



### Detailed Answer Key

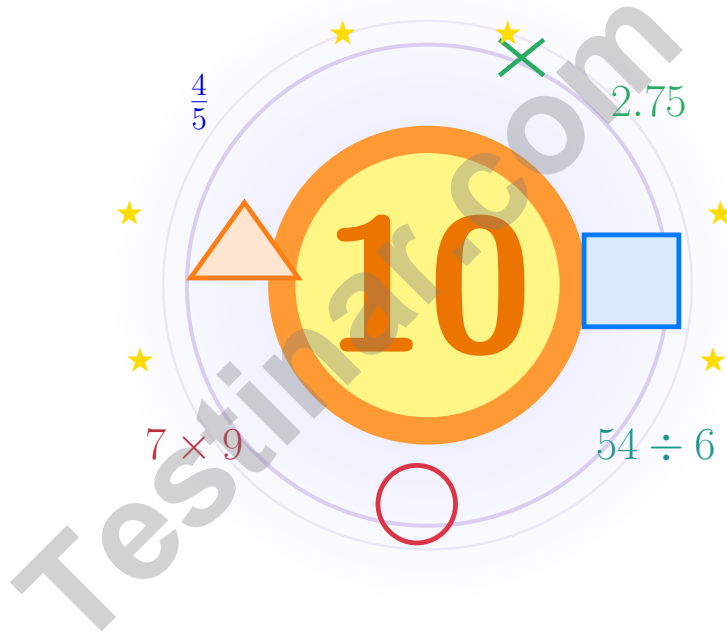
Step-by-step explanations for every question



PREPARE.  
PRACTICE.  
SUCCEED!

# 10 Iowa ISASP Grade 5 Math Practice Tests

*Bright review, thoughtful practice, and steady confidence for Grade 5*



Ten full tests, a focused quick review, and student-friendly support that keeps practice clear and encouraging.

**Jay Daie and Reza Nazari**



# Copyright ©

## Testinar Inc



Published by Testinar Inc

[Testinar.com](http://Testinar.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.

This publication is independently produced and has no official connection to any state, district, or national testing program.

Test names and organizational names used herein are the property of their respective trademark holders.



*Copyright ©*

# Welcome!

This book is a place to practice bravely and think clearly

## Dear Grade 5 Mathematician

This book gives you ten chances to read carefully, solve thoughtfully, and build steady math confidence. Some problems will feel friendly right away. Some will take more patience. Both kinds help you grow.

The goal is not to feel perfect before you begin. The goal is to practice honest effort, learn from corrections, and notice how much stronger your thinking becomes over time.

### Read

Slow down and understand the task.

### Solve

Show clear steps and good choices.

### Learn

Use mistakes as clues for what comes next.

**A strong habit from the start:** keep your work neat, estimate when it helps, write units carefully, and do not let one hard problem decide your mood for the whole page.



# How to Use This Book

A simple routine that turns practice into real progress

## Step 1

**Warm up with the quick review.**

Spend a few minutes refreshing the ideas before the test begins.

## Step 2

**Take one full practice test.**

Work in a calm spot and aim for careful thinking before speed.

## Step 3

**Check your work honestly.**

Circle missed questions and notice which skills need another look.

## Step 4

**Fix and reflect.**

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



**A Good 10-Week Rhythm**

<b>Week 1</b>	Take Test 1 and notice your starting strengths.
<b>Week 2</b>	Take Test 2 and slow down on word problems.
<b>Week 3</b>	Take Test 3 and sharpen multiplication and division checks.
<b>Week 4</b>	Take Test 4 and focus on fractions and decimals.
<b>Week 5</b>	Take Test 5 and watch your labels and units closely.
<b>Week 6</b>	Take Test 6 and practice calmer pacing.
<b>Week 7</b>	Take Test 7 and compare your habits with the earlier weeks.
<b>Week 8</b>	Take Test 8 and focus on tidy, checkable work.
<b>Week 9</b>	Take Test 9 and compare your progress with the way you worked in the earlier weeks.
<b>Week 10</b>	Take Test 10 and finish with steady, confident effort while using every strong habit you built.



# Table of Contents

★ Practice Test 1	_____	21
★ Practice Test 2	_____	36
★ Practice Test 3	_____	51
★ Practice Test 4	_____	66
★ Practice Test 5	_____	81
★ Practice Test 6	_____	96
★ Practice Test 7	_____	111
★ Practice Test 8	_____	125
★ Practice Test 9	_____	137
★ Practice Test 10	_____	151
<b>Practice Test Answer Keys</b>	_____	<b>165</b>
<b>Practice Test Answers and Explanations</b>	_____	<b>171</b>

## 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





4) Which student added correctly?

Student	Work for $4.28 + 2.35$
Maya	$4.28 + 2.35 = 6.53$
Chen	$4.28 + 2.35 = 6.63$
Aisha	$4.28 + 2.35 = 6.73$
Jordan	$4.28 + 2.35 = 6.43$

- A. Maya
- B. Chen
- C. Aisha
- D. Jordan
- 5) Maya and Zoe started with one whole sandwich. Maya ate  $\frac{3}{8}$  of it, and Zoe ate  $\frac{1}{4}$  of it. How much remains?
- A.  $\frac{3}{8}$
- B.  $\frac{1}{2}$
- C.  $\frac{1}{4}$
- D.  $\frac{5}{8}$
- 6) A graph of a number pattern passes through  $(1, 5)$ ,  $(2, 10)$ ,  $(3, 15)$ . The  $y$ -value is 5 times the  $x$ -value. What ordered pair should be plotted when  $x = 4$ ?

*Record your answer in the space provided.*

7) Evaluate:  $25 - (8 + 2) \div 5$

- A. 3
- B. 17
- C. 21
- D. 23



## 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





## End of Practice Test

Nice work. Pause, breathe, and check your answers  
with care.

Testinar.com



Scan me

Grade 5 Mathematics

10

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



## 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.**

Testinar.com



## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(5.G.B.4)** One angle measures 95 degrees, which is greater than 90 degrees, making this an obtuse triangle.
- 2) **Choice A is correct.** **(5.G.A.2)** The first coordinate, 50, matches the x-axis label: gallons used. The second coordinate, 400, matches the y-axis label: miles traveled. So the point means miles traveled is 400 when gallons used is 50.
- 3) **Choice B is correct.** **(5.G.A.2)** Point R is 8 units right and 5 units up from the origin, so the coordinates are (8, 5).
- 4) **Choice B is correct.** **(5.NBT.B.7)** Add by place value: hundredths  $8 + 5 = 13$  (write 3, carry 1); tenths  $2 + 3 + 1 = 6$ ; ones  $4 + 2 = 6$ . The correct sum is 6.63, which matches Chen's work.
- 5) **Choice A is correct.** **(5.NF.A.2)** Together eaten:  $\frac{3}{8} + \frac{2}{8} = \frac{5}{8}$ . Remaining:  $1 - \frac{5}{8} = \frac{3}{8}$ .
- 6) **The correct answer is (4, 20).** **(5.G.A.2)** When  $x = 4$ , multiply by 5 to find the  $y$ -value:  $4 \times 5 = 20$ . The point to plot is (4, 20).
- 7) **Choice D is correct.** **(5.OA.A.1)** Start with the parentheses:  $8 + 2 = 10$ . Then  $10 \div 5 = 2$ , and subtracting gives  $25 - 2 = 23$ .
- 8) **The correct answer is  $4\frac{1}{4}$ .** **(5.MD.B.2)** Count the X marks above each length. The length  $4\frac{1}{4}$  has 3 X marks, more than any other pencil length.
- 9) **Choice B is correct.** **(5.NBT.A.2)** Dividing by a power of 10 shifts the value to a smaller place.  $5,600 \div 100 = 56$  books per classroom. This confirms the answer.
- 10) **Choice B is correct.** **(5.NBT.A.1)** "Eleven and seventy-two thousandths" =  $11 + \frac{72}{1000} = 11 + 0.072 = 11.072$ .
- 11) **Choice A is correct.** **(5.NBT.B.7)**  $9.30 - 3.45 = 5.85$ . The arrow starts at 9.30 and lands at 5.85.
- 12) **Choice B is correct.** **(5.NF.B.6)** Area =  $\frac{4}{5} \times \frac{3}{4} = \frac{12}{20}$ , which simplifies to  $\frac{3}{5}$  m<sup>2</sup>.
- 13) **Choice D is correct.** **(5.OA.A.1)** The parentheses make the two expressions different. Left:  $4 \times (10 - 6) = 4 \times 4 = 16$ . Right:  $(4 \times 10) - 6 = 40 - 6 = 34$ . Since  $16 < 34$ , the left side is less.
- 14) **Choice A is correct.** **(5.NBT.B.5)** Student A correctly applies the distributive property:  $14 \times 16 = 14 \times (10 + 6) = 140 + 84 = 224$ . Student B made an error; the correct product is 224, not 124.
- 15) **Choice A is correct.** **(5.OA.A.2)** Ben spends 12 + 5 dollars each week. Since he does this for 3 weeks, multiply the weekly amount by 3:  $3 \times (12 + 5)$ .
- 16) **Choice C is correct.** **(5.NBT.A.3)**  $0.750 = 0.75$  because the trailing zero does not change value. The others are NOT equivalent.
- 17) **Choice B is correct.** **(5.NF.B.4)** Convert:  $2\frac{1}{2} = \frac{5}{2}$  and  $1\frac{1}{3} = \frac{4}{3}$ . Multiply:  $\frac{5}{2} \times \frac{4}{3} = \frac{20}{6} = 3\frac{2}{6} = 3\frac{1}{3}$ .
- 18) **Choice A is correct.** **(5.G.A.1)** The student confused the order. The correct pair is (3, 5): 3 units right (x-coordinate) and 5 units up (y-coordinate). The student wrote (5, 3), which swaps them.
- 19) **Choice C is correct.** **(5.NBT.B.6)**  $3,024 \div 48 = 63$  cartons. Check:  $48 \times 63 = 3,024$ .
- 20) **Choice B is correct.** **(5.MD.A.1)** Divide milliliters by 1,000:  $250 \div 1000 = 0.25$  L.
- 21) **Choice C is correct.** **(5.MD.C.5)** The base layer has  $9 \times 6 = 54$  square units. Divide the volume by the base area:  $378 \div 54 = 7$ , so the height is 7 feet.
- 22) **Choices A, B are correct.** **(5.NBT.A.2)** A and B both equal 1,000, so each has exactly 3 zeros at the end. C equals 100, which has 2 zeros at the end, and D equals 10,000, which has 4 zeros at the end.
- 23) **Choice D is correct.** **(5.MD.C.5)** Adult tickets:  $3 \times 22.50 = 67.50$  dollars. Student tickets:  $5 \times 15.00 = 75.00$  dollars. Total:  $67.50 + 75.00 = 142.50$  dollars.
- 24) **Choice D is correct.** **(5.MD.C.3)**  $V = 6 \times 4 \times 3 = 72$  cubic meters.
- 25) **The correct answer is  $\frac{2}{3}$ .** **(5.NF.A.2)** Divide both by 6 (the GCF):  $\frac{12 \div 6}{18 \div 6} = \frac{2}{3}$ .
- 26) **Choice D is correct.** **(5.NF.B.4)**  $\frac{4}{10} = \frac{2}{5}$ . Then  $\frac{2}{5} \times \frac{5}{8} = \frac{10}{40} = \frac{1}{4}$ .
- 27) **Choice D is correct.** **(5.NF.B.7)**  $\frac{1}{3} \div 6 = \frac{1}{3} \times \frac{1}{6} = \frac{1}{18}$ .
- 28) **The correct answer is 3.** **(5.NF.B.4)** First simplify  $\frac{2}{6}$  to  $\frac{1}{3}$ . Then  $9 \times \frac{1}{3} = \frac{9}{3} = 3$ .
- 29) **Choice C is correct.** **(5.OA.B.3)** Tomato seeds are always 3 times basil seeds:  $60 \div 20 = 3$ ,  $120 \div 40 = 3$ ,  $180 \div 60 = 3$ ,  $240 \div 80 = 3$ .



### Case Closed: Success Ahead

---

## Greetings, Math Detective!

◇ Outstanding investigation! You've cracked the code on 10 complete practice tests, examining every clue and solving every mathematical mystery like a brilliant detective! Each problem was a puzzle, and you methodically gathered evidence, analyzed patterns, and reached accurate conclusions. That analytical thinking you've developed will serve you well on test day and beyond! ◇

★ **Here's what master detectives know:** not every case solves itself immediately. Sometimes you need to examine the evidence from different angles, try various approaches, and remain persistent until you crack the code. You've practiced exactly that through these 10 tests! Your investigative skills have sharpened considerably, and you're ready to solve any mathematical mystery that comes your way! ★

#### Detective's Case File: Your Skills

- **Clue Collection:** You gather all important information from problems before solving!
- **Pattern Recognition:** You identify mathematical patterns like a trained investigator!
- **Evidence Analysis:** You evaluate which strategies work best for each problem type!
- **Case Resolution:** You stay focused until you've found the correct solution!

**Detective wisdom:** the best investigators take notes about their methods so they can solve similar cases faster in the future. Your brain has been doing exactly that throughout these 10 tests, storing successful strategies in your mental filing cabinet. On test day, you'll be able to retrieve those proven methods instantly!

If you want to share a proud moment or ask a question, please email me at [jay@testinar.com](mailto:jay@testinar.com). I'd love to hear from you!

**Jay Daie**

Your Math Detective Coach

# PRACTICE TODAY. MASTER TOMORROW.

Give your child the confidence to excel in **Grade 5 Math!**  
This book includes **10 complete practice tests** designed to build strong skills, improve test readiness, and achieve success.



# 10

## COMPLETE PRACTICE TESTS

- ✓ Realistic. Rigorous.
- ✓ Results-Driven.

More practice today for a **stronger** tomorrow.

## THIS BOOK HELPS YOUR CHILD:



### Build Confidence

Familiar, focused practice reduces anxiety and boosts self-belief.



### Strengthen Skills

Reinforces key math concepts through high-quality, standards-aligned questions.



### Improve Test Readiness

Full-length tests help students understand test format, pacing, and question types.



### Track Progress

Identify strengths and target areas with purposeful practice.



### Achieve Success

Better preparation leads to higher scores and bright futures.

## COVERS ALL ESSENTIAL TOPICS

- ✓ Whole Numbers & Operations
- ✓ Fractions & Decimals
- ✓ Algebraic Thinking
- ✓ Geometry
- ✓ Measurement & Data
- ✓ Graphing & Data Analysis
- ✓ Number Patterns
- ✓ Word Problems
- ✓ Ratio & Proportion
- ✓ Perimeter, Area & Volume
- ✓ And More!



Visit [testinar.com/math5](https://testinar.com/math5)

for more Grade 5 math resources and practice materials!



Aligned to Standards



Created by Educators



Trusted by  
Parents & Teachers