

8

Utah RISE

GRADE 7

MATH

PRACTICE TESTS



**Standards Aligned
Problem Solving**

For Comprehensive
Assessment Programs



**8 PRINTED
TESTS**



**2 ONLINE
TESTS**



Use these two additional online practice tests
for **extra review** after the printed tests in this book.



BUILD CONFIDENCE



STRENGTHEN SKILLS



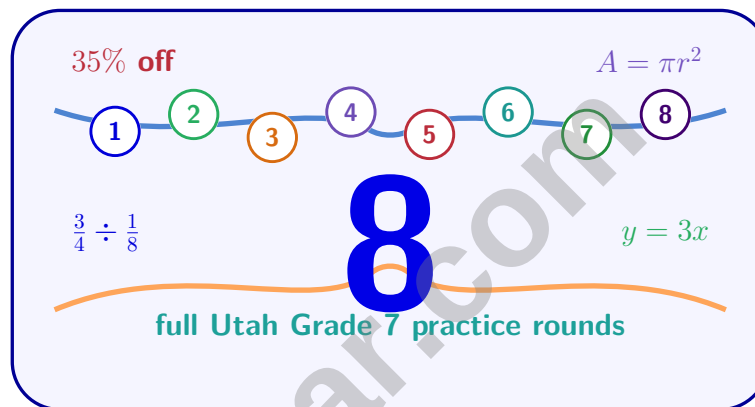
THINK SMARTER



BE TEST-READY

8 Utah RISE Grade 7 Math Practice Tests

A sturdy preparation path for Utah Grade 7 rational numbers, proportional relationships, equations, scale drawings, statistics, and chance



Eight complete 40-question Grade 7 RISE practice rounds with proportional relationships, percents, rational numbers, expressions, equations, geometry, statistics, probability, answer keys, and clear explanations for every item.

Jay Daie and Reza Nazari



Copyright ©

Testinar Inc



Published by Testinar Inc

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, Utah Grade 7 Problem Solver!

Eight focused rounds for sharper RISE math thinking

This book gives you eight full Grade 7 RISE math practice tests. Each round is built to help you notice structure, compare quantities, use proportional reasoning, handle rational numbers, and explain your thinking with care.

Your Utah Practice Promise

I will read every question carefully, choose a strategy that fits, write enough work to prove my answer, and use corrections as training for the next test.

Read

Model

Verify

How to Use This Book

An eight-session plan for confident Grade 7 review

1. **Warm up with the review pages.** Notice the big ideas before starting the tests.
2. **Complete one test at a time.** Treat each 40-question round like a real practice session.
3. **Show your reasoning.** Jot a proportion, equation, diagram, number line, or quick estimate when it helps.
4. **Correct actively.** Rework missed items before reading the explanation.
5. **Choose the next target.** After each test, name one skill and one habit to improve.

Utah review rhythm: Work a test, score it, study your misses, then come back ready for the next round with one clear goal.



What Is Inside?

Eight RISE tests, 320 questions, and a complete review path

Part	What You Will Practice
Tests 1–3	Proportional relationships, unit rates, percents, rational-number operations, and careful reading.
Tests 4–6	Expressions, equations, inequalities, scale drawings, geometry, and multi-step problem solving.
Tests 7–8	Statistics, probability, mixed review, stamina, and choosing efficient strategies.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Grade 7 success means recognizing which idea is being tested even when the next question changes format.

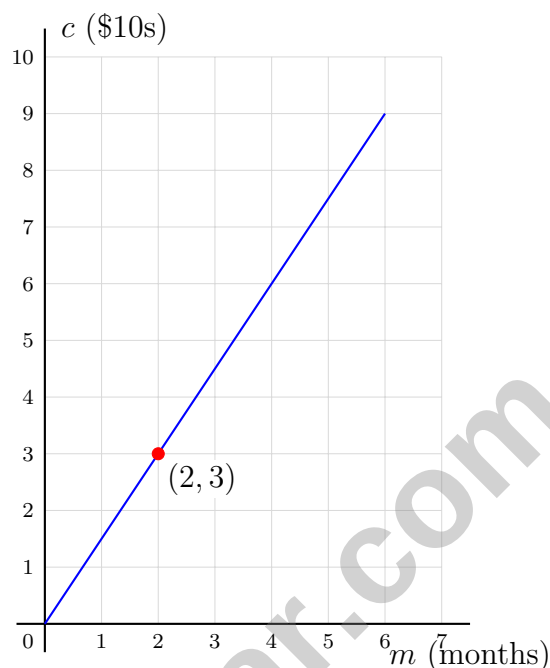


Scan me!
For more practice
& answers

Table of Contents

★ Practice Test 1	_____	14
★ Practice Test 2	_____	29
★ Practice Test 3	_____	43
★ Practice Test 4	_____	58
★ Practice Test 5	_____	71
★ Practice Test 6	_____	86
★ Practice Test 7	_____	100
★ Practice Test 8	_____	115
Practice Test Answer Keys	_____	129
Practice Test Answers and Explanations	_____	134

- 1) The graph shows a proportional relationship between the monthly cost c and the number of months m .



What is the constant of proportionality, in dollars per month?

- ☐ A. \$25 per month
- ☐ B. \$20 per month
- ☐ C. \$10 per month
- ☐ D. \$15 per month
- 2) Evaluate: $-\frac{5}{6} - \frac{1}{3}$

- ☐ A. $\frac{7}{6}$
- ☐ B. $-\frac{1}{2}$
- ☐ C. $-\frac{5}{6}$
- ☐ D. $-1\frac{1}{6}$



3) Which expression is equivalent to $(-8) \div 2$?

☐ A. $(-4) \times 2$

☐ C. $2 \times (-8)$

☐ B. $(-8) \times \frac{1}{2}$

☐ D. $(-2) \times (-4)$

4) What is the exponent when 8.9 is used as the coefficient in scientific notation for 8,900,000,000?

☐ A. 8

☐ C. 10

☐ B. 9

☐ D. 11

5) A bank account earns 3% annual interest on a balance of \$1 000. How much interest will the account earn in one year?

6) At a bakery, you have $(20x + 15)$ cookies. You sell $(8x + 6)$ cookies to a class. How many cookies remain?

Have:	$(20x + 15)$
Sell:	$(8x + 6)$

Left:	?

☐ A. $12x + 9$

☐ C. $12x + 21$

☐ B. $28x + 21$

☐ D. $12x + 15$



Scan me!

For more practice
& answers

- 7) A certificate of deposit starts with \$2,000 and earns 4% annual compound interest. After how many complete years will the balance first exceed \$2,500?

- 8) Simplify: $(y^2)^6$

☐ A. y^8

☐ B. y^{12}

☐ C. y^{36}

☐ D. $2y^6$

- 9) A streaming service costs \$12.99 per month plus a one-time setup fee of \$19.99. Which expression shows the total cost C for n months?

☐ A. $C = 19.99 + 12.99n$

☐ B. $C = 19.99n + 12.99$

☐ C. $C = 19.99(n + 12.99)$

☐ D. $C = 12.99n + 12.99$

- 10) Solve: $-3x + 10 = 1$

☐ A. $x = -3$

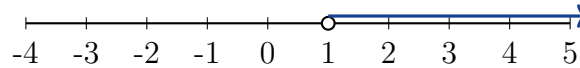
☐ B. $x = 1$

☐ C. $x = 3$

☐ D. $x = 9$



- 1) Which statement correctly describes what the open circle represents on a number line?



- ☐ A. The boundary value is included in the solution set
 ☐ C. The solution includes only positive numbers
☐ B. The boundary value is NOT included in the solution set
 ☐ D. The solution includes all real numbers
- 2) Solve: $\frac{2x}{3} + 4 = 10$

$$\begin{array}{l} \frac{2x}{3} + 4 = 10 \\ \downarrow \text{Subtract 4} \\ \frac{2x}{3} = 6 \\ \downarrow \text{Multiply by } \frac{3}{2} \\ x = 9 \end{array}$$

- ☐ A. $x = 6$
☐ C. $x = 12$
☐ B. $x = 9$
☐ D. $x = 15$
- 3) A book costs \$25. With sales tax of 6%, what is the total cost?
- ☐ A. $25 + 6$
☐ C. 25×1.06
☐ B. 25×0.06
☐ D. $25 - 0.06$



- 4) A circle has radius 7 cm. Find its circumference using $\pi \approx \frac{22}{7}$.

- 5) Which statement is true?

☐ A. $(-6) \times 3 > 0$

☐ C. $5 \times (-2) = (-2) \times 5$

☐ B. $(-4) \times (-4) < 0$

☐ D. $(-1) \times 7 < (-1) \times 6$

- 6) A line plot shows the number of hours a student practices violin each week over 10 weeks: 1, 2, 2, 2, 3, 3, 3, 3, 4, 5. Which measure best describes the typical practice time?

☐ A. The mean (average)☐ C. The median☐ B. The mode☐ D. The range

- 7) A spinner with 5 equal sections is spun twice. How many total outcomes are possible?

☐ A. 5☐ C. 20☐ B. 10☐ D. 25

- 8) A box contains cards numbered 5 through 14. A card is drawn at random. What is the probability of drawing a card with a number divisible by 3?

☐ A. $\frac{1}{5}$

☐ C. $\frac{2}{5}$

☐ B. $\frac{3}{10}$

☐ D. $\frac{1}{3}$



Scan me!

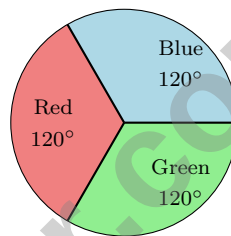
For more practice
& answers

- 1) A parent wants to save money for a child's education. If \$4500 is invested at 5.5% simple interest, what is the difference in total amount between 5 years and 3 years?

☐ A. \$247.50 ☐ C. \$742.50
☐ B. \$990 ☐ D. \$495

- 2) A rectangular prism has dimensions 4 cm × 6 cm × 8 cm. If a vertical plane cuts through it perpendicular to the base, which shape MUST appear in the cross-section?

☐ A. Square ☐ C. Trapezoid
☐ B. Rectangle ☐ D. Triangle



3)

This spinner has three equal 120° sectors. What is $P(\text{Blue})$?

☐ A. $\frac{1}{3}$ ☐ C. $\frac{120}{180}$
☐ B. $\frac{1}{4}$ ☐ D. $\frac{2}{5}$

- 4) If a dataset contains 20 values and you place them in a stem-and-leaf plot, what is the median position?

☐ A. Between 10th and 11th values ☐ C. The 11th value
☐ B. The 10th value ☐ D. Between 9th and 10th values



Scan me!
For more practice
& answers

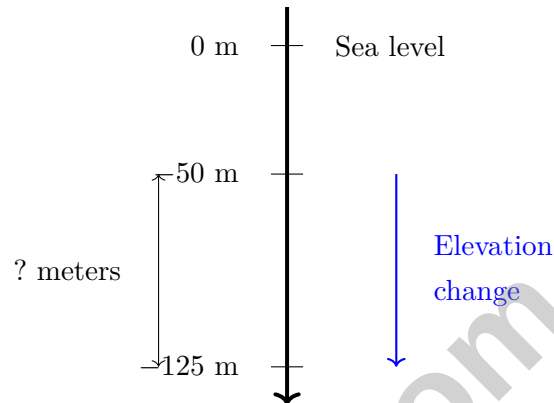
5) Expand: $\frac{1}{5}(10r + 5)$

☐ A. $2r + 1$

☐ C. $2r + 5$

☐ B. $10r + 1$

☐ D. $r + 1$



6)

A scuba diver starts at -50 meters (below sea level). She descends to 125 meters below sea level. What is the net change in her elevation (in meters)?

☐ A. 175 meters

☐ C. -75 meters

☐ B. 75 meters

☐ D. -175 meters

7) Account balance was $-\$45$ (overdrawn). After a deposit of $\$100$, what is the new balance?



Utah RISE Grade 7 Practice Test Answer Keys**How to use this section with a Grade 7 student:**

1. check the answer first and circle any item that needs another look
2. retry the problem with fresh work before reading the explanation
3. write one short lesson learned from each missed or guessed item

A strong review routine turns every correction into a sharper plan for the next Utah RISE practice test.



Scan me!
For more practice
& answers

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** **(7.RP.1-7.RP.3)** The point (2, 3) means the cost is \$30 after 2 months because the vertical axis is measured in tens of dollars. Therefore, $k = 30/2 = 15$ dollars per month.
- 2) **Choice D is correct.** **(7.NS.1-7.NS.3)** Common denominator is 6: $-\frac{5}{6} - \frac{2}{6} = -\frac{7}{6} = -1\frac{1}{6}$.
- 3) **Choice B is correct.** **(7.NS.1-7.NS.3)** Division by a number equals multiplication by its reciprocal: $(-8) \div 2 = (-8) \times \frac{1}{2} = -4$.
- 4) **Choice B is correct.** **(7.NS.1-7.NS.3)** $8,900,000,000 = 8.9 \times 10^9$. Count 9 places from right of first digit to decimal point.
- 5) **The correct answer is \$30.** **(7.RP.3)** Interest earned: $0.03 \times 1000 = \$30$.
- 6) **Choice A is correct.** **(7.EE.1-7.EE.2)** Subtract: $(20x + 15) - (8x + 6) = 20x + 15 - 8x - 6 = 12x + 9$ cookies.
- 7) **The correct answer is 6.** **(7.RP.3)** Year 5: $2000(1.04)^5 = 2433.31$. Year 6: $2000(1.04)^6 = 2530.64 > 2500$.
- 8) **Choice B is correct.** **(7.EE.1-7.EE.2)** When raising a power to a power, multiply the exponents: $(y^2)^6 = y^{2 \times 6} = y^{12}$.
- 9) **Choice A is correct.** **(7.EE.4a)** Setup fee is \$19.99 plus \$12.99 per month, so $C = 19.99 + 12.99n$.
- 10) **Choice C is correct.** **(7.EE.3-7.EE.4)** Subtract 10: $-3x = -9$. Divide by -3 : $x = 3$.
- 11) **Choice B is correct.** **(7.EE.4a)** Area: $3(x + 2) = 30$. Divide by 3: $x + 2 = 10$. (So length is 10 units; if needed, $x = 8$.)
- 12) **Choice B is correct.** **(7.EE.3-7.EE.4)** Add 15: $6x = 18$. Divide by 6: $x = 3$.
- 13) **Choice C is correct.** **(7.RP.1-7.RP.3)** Unit rate = $4 \div 3 \approx 1.33$ miles per hour (or exactly $\frac{4}{3}$ miles per hour).
- 14) **Choice D is correct.** **(7.NS.2d)** Divide $3 \div 4 = 0.75$. The denominator is 2^2 , which divides evenly.
- 15) **Choice A is correct.** **(7.NS.1-7.NS.3)** Amount needed: $\frac{5}{6} - \frac{2}{3} = \frac{5}{6} - \frac{4}{6} = \frac{1}{6}$ cup.
- 16) **Choice A is correct.** **(7.EE.1-7.EE.2)** $50 - 0.05(50) = 50(1 - 0.05) = 50(0.95)$. The factor 0.95 captures the scale: keeping 95% of the original.
- 17) **Choice B is correct.** **(7.G.1-7.G.5)** First reflection over y -axis: $(3, 4) \rightarrow (-3, 4)$. Second reflection over x -axis: $(-3, 4) \rightarrow (-3, -4)$.
- 18) **Choice B is correct.** **(7.SP.5-7.SP.8)** PROBABILITY has 11 letters. Two B's are present (at positions 4 and 6), so $P(B) = \frac{2}{11}$.
- 19) **The correct answer is B, D.** **(7.NS.1-7.NS.3)** B: $-33 + 33 = 0$ (opposites sum to zero). D: $-100 + 100 = 0$ (opposites sum to zero). A: $20 + (-10) = 10$ (not zero). C: $14 + (-7) = 7$ (not zero).
- 20) **Choice D is correct.** **(7.RP.3)** ATM fee = $0.03 \times 300 = \$9.00$.
- 21) **Choice A is correct.** **(7.G.4-7.G.6)** Rectangle: $9 \times 5 = 45 \text{ m}^2$. Triangle: $\frac{1}{2} \times 6 \times 4 = 12 \text{ m}^2$. Total: $45 + 12 = 57 \text{ m}^2$. The student correctly applied the triangle area formula.
- 22) **Choice C is correct.** **(7.RP.1-7.RP.3)** Set up: $\frac{25}{100} = \frac{18}{x}$. Cross multiply: $25x = 1800$, so $x = 72$.
- 23) **Choice C is correct.** **(7.G.4-7.G.6)** Base area = $\frac{1}{2}(4 + 6) \times 3 = \frac{1}{2} \times 10 \times 3 = 15 \text{ cm}^2$. Volume = $15 \times 10 = 150 \text{ cm}^3$.
- 24) **Choice A is correct.** **(7.G.1-7.G.5)** The sum of angles in a triangle is 180° . Third angle = $180^\circ - 50^\circ - 60^\circ = 70^\circ$.
- 25) **The correct answer is (6, 7).** **(7.NS.1-7.NS.3)** $6^2 = 36$ and $7^2 = 49$. Since $36 < 40 < 49$, the answer is between 6 and 7.
- 26) **Choice B is correct.** **(7.G.4-7.G.6)** A radius has one endpoint at the center and one on the circle, not both on the circle, so it is not a chord.
- 27) **Choice B is correct.** **(7.G.1-7.G.5)** We know two angles (40° and 65° , so the third is 75°) and one side ($HI = 8 \text{ cm}$) between two known angles. This is AAS (Angle–Angle–Side), which uniquely determines the triangle.
- 28) **Choice C is correct.** **(7.SP.1-7.SP.4)** Morning: $\frac{45}{60} = 0.75$ or 75%. Afternoon: $\frac{54}{72} = 0.75$ or 75%. Both show equal proportions.
- 29) **Choice D is correct.** **(7.RP.3)** 20% of 250 is $0.20 \times 250 = 50$ new employees.
- 30) **Choice D is correct.** **(7.RP.1-7.RP.3)** Unit rate = $\frac{4/5}{2/5} = \frac{4}{5} \times \frac{5}{2} = \frac{20}{10} = 2$ documents per minute.



Hi, Confident Learner!

◇ This wide-ranging book gave you eight serious Grade 7 practice tests, so you had repeated chances to build accuracy, pacing, and confidence. Grade 7 math can feel big because it brings together rational numbers, expressions, equations, geometry, probability, and data. ◇

★ **Remember this:** But big topics become manageable when you practice one skill at a time. That is what you have been doing with every test in this book. ★

Confidence Builders

- **Know the Goal:** Identify what the question asks.
- **Use Vocabulary:** Math words point to math actions.
- **Show Work:** Give yourself something to check.
- **Celebrate Effort:** Practice is proof that you are moving.

Grade 7 test-day tip: When reviewing, do not only mark wrong answers. Write one sentence about what you learned from each one.

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

Jay Daie

Your Confidence Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **8** full-length Math practice tests and **2** online tests to help Grade 7 students build confidence, strengthen skills, and excel on standardized assessments.

Each practice test is carefully crafted to reflect the latest standards and includes a variety of question types, realistic test conditions, and detailed answer explanations.

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



THIS BOOK INCLUDES:

8 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answer Explanations



MORE PRACTICE. GREATER RESULTS.

Give your child the tools to build strong math skills, confidence, and a positive attitude toward learning.

WHAT YOU'LL GAIN



Stronger Math Skills

Build a solid foundation through targeted practice and review.



Better Problem Solving

Develop logical thinking and effective solution strategies.



Deeper Understanding

Reinforce key concepts with clear explanations and meaningful practice.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Achieve Success

Build confidence and perform your best on test day.

TOPICS COVERED

- ✓ Ratios & Proportions
- ✓ The Number System
- ✓ Expressions & Equations
- ✓ Geometry
- ✓ Percents & Decimals
- ✓ Statistics & Probability
- ✓ Data Analysis
- ✓ Measurement & Conversions
- ✓ Algebraic Thinking
- ✓ And More!



2 ONLINE TESTS

Use these two additional online practice tests for extra review after the printed tests in this book.



2 EXTRA ONLINE TEST ACCESS CODE IS INSIDE THE BOOK!

Don't lose it—your extra practice and success start here!



VISIT **TESTINAR.COM/MATH7** FOR MORE PRACTICE TESTS



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY