

# 9 Louisiana

# LEAP

GRADE 7

# MATH

## PRACTICE TESTS

Standards Aligned Problem Solving  
For Comprehensive Assessment Programs

Program



**9 PRINTED TESTS**



**2 ONLINE TESTS**



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



**BUILT FOR ACAP**  
Standards-Aligned



**STRENGTHEN  
SKILLS**



**SHARPEN  
THINKING**



**BE TEST-READY**  
Improve Performance

# 9 Louisiana LEAP Grade 7 Math Practice Tests

*Standards-Aligned Louisiana Practice for Proportional Reasoning, Expressions, Geometry, Statistics, and Probability*



Nine complete 40-question Grade 7 LEAP 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](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, Louisiana Grade 7 Problem Solver!

Nine focused rounds for sharper LEAP math thinking

This book gives you nine full Grade 7 LEAP 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 Louisiana 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

A nine-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.

**Louisiana 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?

Nine LEAP tests, 360 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 7–9    | 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.

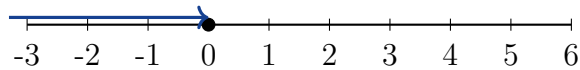


Scan me!  
For more practice  
& answers

# Table of Contents

|                                        |       |     |
|----------------------------------------|-------|-----|
| ★ Practice Test 1                      | _____ | 15  |
| ★ Practice Test 2                      | _____ | 30  |
| ★ Practice Test 3                      | _____ | 45  |
| ★ Practice Test 4                      | _____ | 58  |
| ★ Practice Test 5                      | _____ | 73  |
| ★ Practice Test 6                      | _____ | 87  |
| ★ Practice Test 7                      | _____ | 101 |
| ★ Practice Test 8                      | _____ | 115 |
| ★ Practice Test 9                      | _____ | 130 |
| Practice Test Answer Keys              | _____ | 144 |
| Practice Test Answers and Explanations | _____ | 150 |

1) What inequality does this number line show?



☐ A.  $x > 0$

☐ C.  $x \geq 0$

☐ B.  $x < 0$

☐ D.  $x \leq 0$

2) An event has a probability of  $\frac{2}{5}$ . What is the probability of the complement (the event NOT happening)?

☐ A.  $\frac{2}{5}$

☐ C.  $\frac{1}{5}$

☐ B.  $\frac{3}{5}$

☐ D.  $\frac{5}{2}$

3) An event planner receives \$3,000 for planning a wedding. She must pay a 12% vendor coordination fee from her earnings. How much does she keep after the fee?

☐ A. \$360

☐ C. \$2,640

☐ B. \$2,400

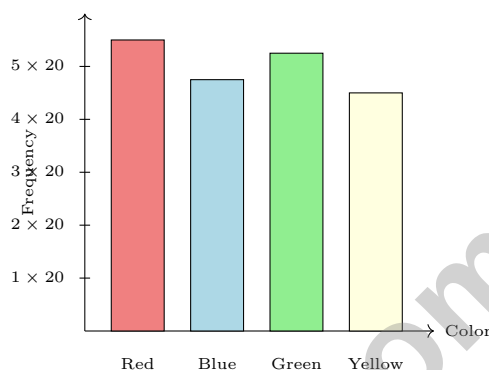
☐ D. \$3,360



Scan me!  
For more practice  
& answers

4) A frequency table records the results of spinning a spinner 400 times:

| Color | Red | Blue | Green | Yellow |
|-------|-----|------|-------|--------|
| Freq  | 110 | 95   | 105   | 90     |



If the spinner is spun an additional 200 times and maintains the same experimental probability, which color would you expect to appear most often?

- ☐ A. Blue
 ☐ C. Green  
☐ B. Red
 ☐ D. Yellow

5) The stem-and-leaf plot below shows test scores.

| Stem | Leaves     |
|------|------------|
| 4    | 2, 6, 8    |
| 5    | 1, 3, 7, 9 |
| 6    | 0, 5, 5, 8 |
| 7    | 2, 4, 6    |

What is the maximum score?

- ☐ A. 76
 ☐ C. 79  
☐ B. 77
 ☐ D. 86

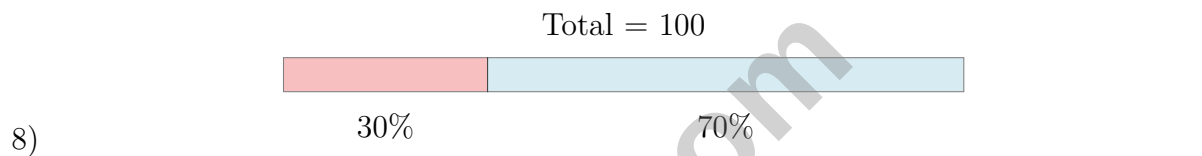


6) An arc is a portion of:

- ☐ A. The radius ☐ C. The circumference  
☐ B. The diameter ☐ D. The sector

7) A blueprint scale is  $\frac{1}{4}$  inch to 1 meter. Two points on the blueprint are 3 inches apart. How far apart are they in meters?

- ☐ A. 3 meters ☐ C. 12 meters  
☐ B. 0.75 meters ☐ D. 1.33 meters



The bar model shows 30% and 70% of a total. If the total is 100, how much is 30%?

- ☐ A. 25 ☐ C. 35  
☐ B. 40 ☐ D. 30

9) A store marks up a product by \$5 on a cost of \$25. What is the selling price?

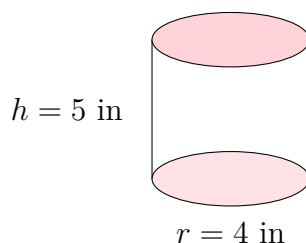
- ☐ A. \$35 ☐ C. \$20  
☐ B. \$45 ☐ D. \$30

10) One package contains  $4\frac{1}{2}$  cups of cereal and serves 3 people equally. How much cereal does each person get?

- ☐ A.  $\frac{1}{2}$  cup per person ☐ C. 3 cups per person  
☐ B.  $\frac{9}{2}$  cups per person ☐ D.  $\frac{3}{2}$  cups per person



Scan me!  
For more practice  
& answers



1)

Find the lateral surface area (curved side) of the cylinder. Use  $\pi \approx 3.14$ .

☐ A.  $62.8 \text{ in}^2$

☐ C.  $125.6 \text{ in}^2$

☐ B.  $100.48 \text{ in}^2$

☐ D.  $251.2 \text{ in}^2$

2) You can buy 8 pencils for  $\frac{1}{2}$  dollar. How much does one pencil cost?

☐ A. \$0.04

☐ C. \$0.08

☐ B. \$0.16

☐ D. \$0.0625

3) The equation  $y = -2x$  describes a proportional relationship. Which point lies on the line?

☐ A.  $(-1, -2)$

☐ C.  $(0, 2)$

☐ B.  $(2, 4)$

☐ D.  $(1, -2)$

4) The equation  $y = \frac{4}{5}x$  represents a proportional relationship. Which point lies on the line?

☐ A.  $(5, 5)$

☐ C.  $(4, 5)$

☐ B.  $(4, 3)$

☐ D.  $(5, 4)$



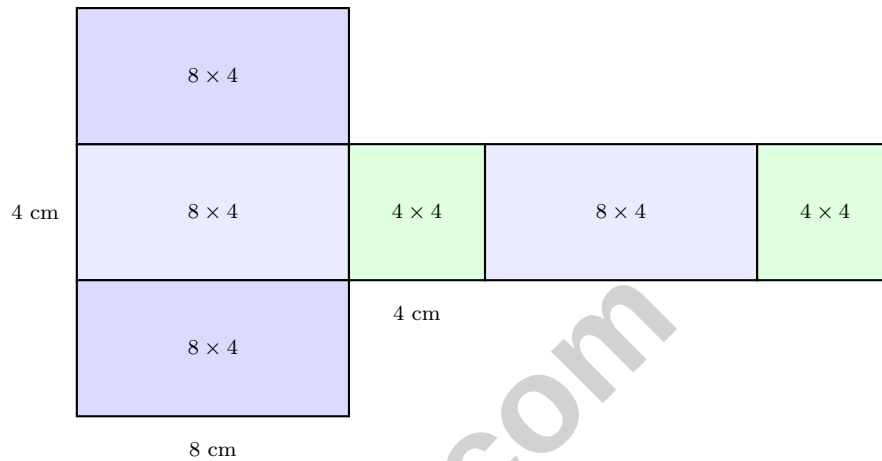
5) Factor:  $4c - 12d$ 

☐ A.  $4(c - 3d)$

☐ C.  $12(c - d)$

☐ B.  $2(2c - 6d)$

☐ D.  $c(4 - 12d)$



6)

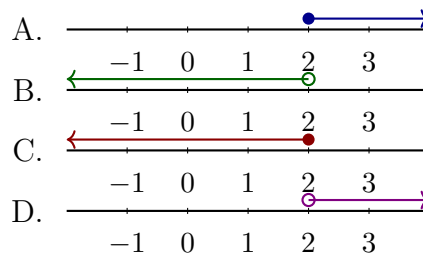
The net folds into a rectangular prism with dimensions  $8\text{ cm} \times 4\text{ cm} \times 4\text{ cm}$ . What is its surface area?

☐ A.  $128\text{ cm}^2$

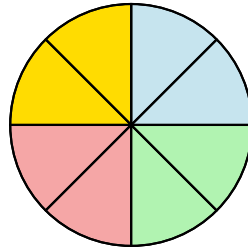
☐ C.  $160\text{ cm}^2$

☐ B.  $144\text{ cm}^2$

☐ D.  $192\text{ cm}^2$

7) Which number line represents  $x \leq 2$ ?

Scan me!  
For more practice  
& answers



1)

A spinner has 8 equal sections: 2 blue, 2 yellow, 2 red, 2 green. If the spinner is spun, which outcome has probability  $\frac{1}{4}$ ?

- ☐ A. Landing on blue                      ☐ C. Landing on all colors  
☐ B. Landing on red or green           ☐ D. Landing on blue or yellow

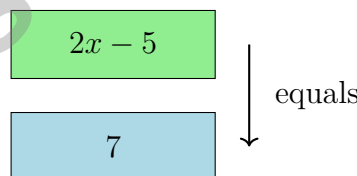
2) Which expression shows  $4x + 8y$  factored completely?

- ☐ A.  $4(x + 2y)$                       ☐ C.  $2(2x + 4y)$   
☐ B.  $4x(1 + 2y)$                    ☐ D.  $x(4 + 8y)$

3) Solve:  $2.5x + 1 = 6$ 

- ☐ A.  $x = 1$                               ☐ C.  $x = 3$   
☐ B.  $x = 2$                               ☐ D.  $x = 4$

4)

Solve:  $2x - 5 = 7$ 

- ☐ A.  $x = 1$                               ☐ C.  $x = 12$   
☐ B.  $x = 6$                               ☐ D.  $x = 24$



- 5) A rectangular prism with dimensions  $3\text{ cm} \times 4\text{ cm} \times 5\text{ cm}$  is sliced by a plane along its main diagonal (from one corner to the opposite corner through the interior). Which shape is NOT a possible cross-section from such a diagonal cut?
- ☐ A. Rectangle ☐ C. Pentagon  
☐ B. Triangle ☐ D. Hexagon
- 6) An angle is  $18^\circ$  more than its complement. What is the measure of the angle?
- ☐ A.  $36^\circ$  ☐ C.  $54^\circ$   
☐ B.  $45^\circ$  ☐ D.  $108^\circ$
- 7) Point  $P(4, -3)$  is reflected over the  $x$ -axis. What are the coordinates of the image  $P'$ ?
- ☐ A.  $(-4, -3)$  ☐ C.  $(4, 3)$   
☐ B.  $(-4, 3)$  ☐ D.  $(4, -3)$
- 8) Two similar triangles have a perimeter of 24 inches and 36 inches respectively. If the smaller triangle has an area of 48 square inches, what is the area of the larger triangle?
- ☐ A. 72 square inches ☐ C. 108 square inches  
☐ B. 96 square inches ☐ D. 144 square inches
- 9) What is  $\frac{1}{2}$  as a decimal?
- ☐ A. 0.2 ☐ C. 0.5  
☐ B. 0.25 ☐ D. 0.52



Scan me!  
For more practice  
& answers

**Louisiana LEAP 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 Louisiana LEAP practice test.**

Testinar.com



## Practice Test Answers and Explanations

### Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** (7.EE.4b) A closed circle at 0 with a left-pointing arrow indicates  $x \leq 0$ .
- 2) **Choice B is correct.** (7.SP.5-7.SP.8) Complement:  $P(\text{not } A) = 1 - P(A) = 1 - \frac{2}{5} = \frac{3}{5}$ .
- 3) **Choice C is correct.** (7.RP.3) Coordination fee =  $0.12 \times 3000 = \$360$ . Amount kept =  $3000 - 360 = \$2,640$ .
- 4) **Choice B is correct.** (7.SP.6) Red has the highest frequency (110) in the first 400 spins, giving an experimental probability of  $\frac{110}{400} = 0.275$ . With 200 more spins:  $0.275 \times 200 = 55$ , so we expect Red to appear most often among the new spins.
- 5) **Choice A is correct.** (7.SP.1-7.SP.4) The largest stem is 7 with the largest leaf 6, giving 76.
- 6) **Choice C is correct.** (7.G.4-7.G.6) An arc is any portion of the circle's perimeter (circumference).
- 7) **Choice C is correct.** (7.RP.1-7.RP.3) If  $\frac{1}{4}$  inch = 1 meter, then 1 inch = 4 meters. So  $3 \times 4 = 12$  meters.
- 8) **Choice D is correct.** (7.RP.3) 30% of 100 is  $0.30 \times 100 = 30$ .
- 9) **Choice D is correct.** (7.RP.3) Selling price = cost + markup =  $25 + 5 = \$30$ . (The markup represents  $\$5/\$25 = 20\%$  of the cost.)
- 10) **Choice D is correct.** (7.RP.1-7.RP.3)  $\frac{4\frac{1}{2}}{3} = \frac{9/2}{3} = \frac{9}{2} \times \frac{1}{3} = \frac{9}{6} = \frac{3}{2}$  cups per person.
- 11) **Choice D is correct.** (7.RP.1-7.RP.3) Proportional relationships must pass through (0, 0). This line starts at (0, 2), so it is not proportional.
- 12) **Choice D is correct.** (7.RP.1-7.RP.3) For a proportional relationship, the ratio  $\frac{\text{toys}}{\text{hours}}$  must be constant. Both ratios equal 30 toys per hour, so the relationship is proportional with  $k = 30$ .
- 13) **Choice C is correct.** (7.RP.3) Returns:  $\frac{1}{10} \times 500 = 50$ . Kept:  $500 - 50 = 450$ . Note:  $\frac{1}{10} = 0.1 = 10\%$ .
- 14) **Choice A is correct.** (7.RP.3) Interest rate =  $(\$1,650 - \$1,500) \div \$1,500 = \$150 \div \$1,500 = 0.10 = 10\%$ .
- 15) **Choice B is correct.** (7.NS.1-7.NS.3) Time = distance  $\div$  rate. The diver descends 18 meters at 1.5 m/s:  $18 \div 1.5 = 12$  seconds.
- 16) **Choice D is correct.** (7.EE.1-7.EE.2) Correct matches: I (Product), II (Power), III (Quotient). Choice D correctly identifies the Quotient Rule for  $\frac{x^{20}}{x^8} = x^{12}$ .
- 17) **Choice B is correct.** (7.EE.3-7.EE.4) Set up:  $12h + 25 = 121 \Rightarrow 12h = 96 \Rightarrow h = 8$ .
- 18) **The correct answer is A,B.** (7.G.4-7.G.6) A is correct: volume  $V = B \times h$  for any prism. B is correct:  $V = 4^3 = 64 \text{ cm}^3$ . C is false: doubling height doubles volume, not triples it. D is false: a triangular prism can have larger volume than a rectangular prism depending on dimensions.
- 19) **Choice C is correct.** (7.NS.1-7.NS.3) The large positive exponent 19 indicates an astronomical distance far beyond our solar system.
- 20) **Choice B is correct.** (7.G.1-7.G.5) Actual height:  $45 \text{ cm} \times 200 = 9000 \text{ cm} = 90 \text{ m}$ .
- 21) **Choice A is correct.** (7.G.1-7.G.5) If  $N + (5, -2) = (8, 7)$ , then  $N = (8, 7) - (5, -2) = (3, 9)$ .
- 22) **The correct answer is 35.** (7.RP.1-7.RP.3) Ratio 2 : 5: if juice = 14, then  $\frac{2}{5} = \frac{14}{x}$ . Cross multiply:  $2x = 70$ , so  $x = 35$  cups water.
- 23) **Choice A is correct.** (7.G.4-7.G.6)  $A = \pi r^2 = 3.14 \times \left(\frac{1}{2}\right)^2 = 3.14 \times 0.25 = 0.785 \text{ m}^2$ .
- 24) **Choice C is correct.** (7.NS.2) A:  $(-6) \times 3 = -18 < 0$  (false). B:  $(-4) \times (-4) = 16 > 0$  (false). C: Both equal  $-10$  (true). D:  $(-1) \times 7 = -7$  and  $(-1) \times 6 = -6$ ;  $-7 \neq -6$  (false).
- 25) **The correct answer is 1050.** (7.SP.1-7.SP.4)  $\frac{35}{140} = \frac{x}{4200}$ . Reduce:  $\frac{1}{4} = \frac{x}{4200} \Rightarrow x = 1050$ .
- 26) **Choice C is correct.** (7.NS.1-7.NS.3)  $9^2 = 81$  and  $10^2 = 100$ . Since  $81 < 99 < 100$ , we have  $9 < \sqrt{99} < 10$ .
- 27) **Choice A is correct.** (7.SP.5-7.SP.8) The largest sector is  $144^\circ$  out of  $360^\circ$ :  $P = \frac{144}{360} = \frac{2}{5} = 0.4$ .
- 28) **Choice D is correct.** (7.G.4-7.G.6) Decompose into a rectangle and a semicircle. Rectangle:  $18 \times 10 = 180 \text{ in}^2$ . Semicircle:  $\frac{1}{2} \times 3.14 \times 5^2 = \frac{1}{2} \times 3.14 \times 25 = 39.25 \text{ in}^2$ . Add:  $180 + 39.25 = 219.25 \text{ in}^2$ .
- 29) **Choice D is correct.** (7.RP.3) Percent from allowance:  $\frac{100}{1300} \approx 0.077 \approx 8\%$ .



## Hi, Confident Learner!

◇ This high-stamina book gave you nine substantial 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](mailto:jay@testinar.com).

**Jay Daie**

Your Confidence Coach

# PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **9** 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:

**9** 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](https://www.testinar.com/math7)

FOR MORE PRACTICE TESTS AND LEARNING RESOURCES.



PRACTICE  
REGULARLY



STAY  
FOCUSED



SOLVE  
CONFIDENTLY



SUCCEED  
BRIGHTLY