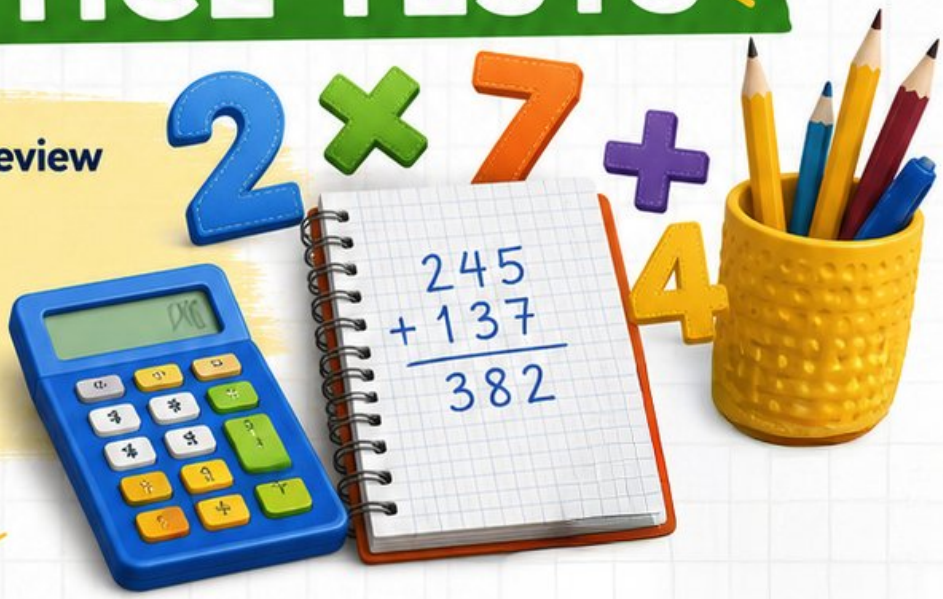
10 North Carolina EOG

GRADE 3 MATH

PRACTICE TESTS

- Complete Standards Review
- Skill Practice
- Word Problems and Answer Key

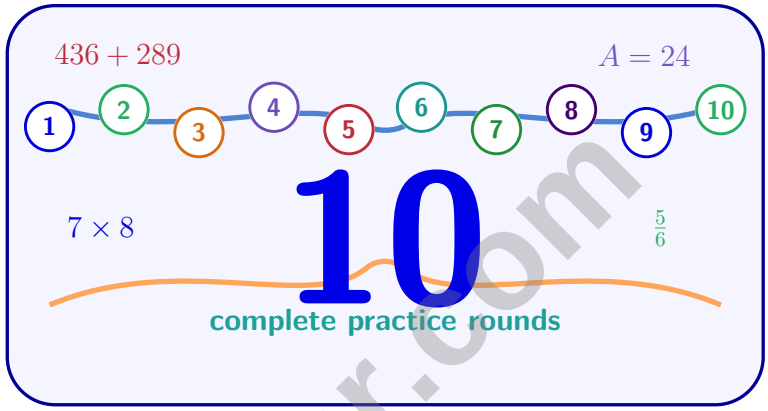


PREPARE PRACTICE SUCCEED!

- Aligned to Grade 3 Math Standards
- Build Confidence and Master Math Skills
- Test-Taking Practice for Success
- Answer Key for Easy Review

10 North Carolina EOG Grade 3 Math Practice Tests

Standards-Aligned Review with Mixed Practice and Answer Key



Ten complete 30-question Grade 3 practice rounds for EOG, built around mountain ridges, coastal maps, and balanced math choices, with answer keys and clear explanations for every item.

Jay Daie and Reza Nazari

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Welcome, North Carolina Math Explorer!

Ten steady rounds on the Tar Heel State math route

This book gives you ten full Grade 3 practice tests for EOG. Each round uses mountain ridges, coastal maps, and balanced math choices to keep practice memorable while you read carefully, choose a strategy, show work, and check the answer.

North Carolina Practice Promise

I will slow down for the question, circle what matters, solve one step at a time, and use mistakes as clues for getting stronger.

How to Use This Book

A ten-session routine for North Carolina EOG review

1. **Preview the skills.** Read the quick review pages before the first test.
2. **Take one test at a time.** Treat each round like a stop on the Tar Heel State math route.
3. **Mark your confidence.** Put a small star beside problems you solved with a strong plan.
4. **Check, then retry.** For missed questions, try the problem again before reading the explanation.
5. **Track your next move.** Use the growth log to name one habit and one skill for the next test.

Good rhythm: Test one day, correct carefully the next day, then return for the next round when your corrections feel clear.

What Is Inside?

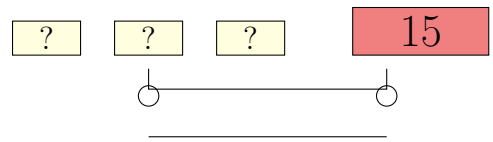
Ten tests, 300 questions, and a full EOG review path

Part	What You Will Practice
Tests 1–3	Warm-up rounds for reading carefully, choosing operations, and using models.
Tests 4–6	Skill-building rounds with fractions, measurement, area, data, and two-step problems.
Tests 7–9	Stamina rounds for mixed review, neat work, and flexible strategies.
Test 10	Final round to show growth across the whole North Carolina book.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Real test readiness means recognizing the skill even when the next question changes topic.

Table of Contents

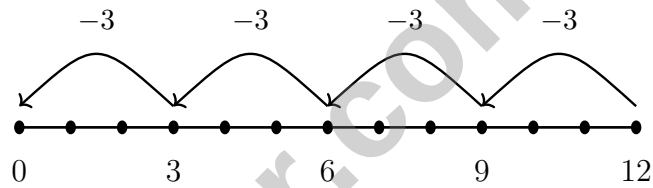
1) A balance scale shows 3 equal weights on one side and 15 on the other. Each weight is the same. What is the unknown weight?



$\square \times 3 = 15$

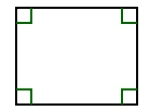
☐ A. 7
☐ B. 6
☐ C. 4
☐ D. 5

2) Which division sentence is shown on the number line?



☐ A. $12 \div 3 = 4$
☐ B. $12 \div 4 = 3$
☐ C. $12 \div 6 = 2$
☐ D. $12 - 3 = 9$

3)

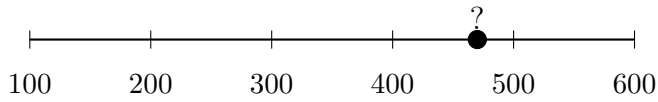


Right angles marked

The corner marks indicate right angles. How many right angles does this quadrilateral have?

☐ A. 2
☐ B. 3
☐ C. 4
☐ D. 5

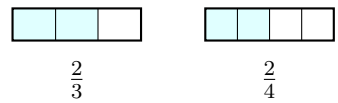
4)



The number shown is between 400 and 500. Is it closer to 400 or 500?

☐ A. Closer to 400
☐ B. Cannot tell
☐ C. Exactly in the middle
☐ D. Closer to 500

5)



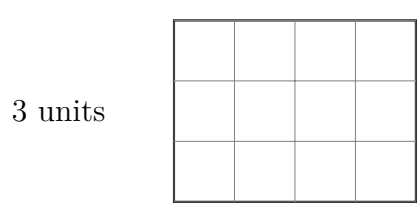
Compare $\frac{2}{3}$ and $\frac{2}{4}$. Which is true?

☐ A. $\frac{2}{3} < \frac{2}{4}$ (bigger denominator = bigger fraction)
☐ B. $\frac{2}{3} = \frac{2}{4}$ (both have numerator 2)
☐ C. $\frac{2}{3} > \frac{2}{4}$
☐ D. $\frac{2}{4} > \frac{2}{3}$ ($4 > 3$, so $\frac{2}{4}$ is larger)

6) Eli's drawing pad is 10 centimeters long and 6 centimeters wide. What is its area?

☐ A. 16 sq cm
☐ B. 32 sq cm
☐ C. 50 sq cm
☐ D. 60 sq cm

7) Look at the rectangle below. How many square units cover the entire shape?



☐ A. 7 square units
☐ B. 8 square units
☐ C. 14 square units
☐ D. 12 square units

8) Ava has two ribbons. Both ribbons are the same length. She colors $\frac{3}{6}$ of one ribbon red and $\frac{1}{2}$ of the other ribbon red. Does she color the same amount on both ribbons?

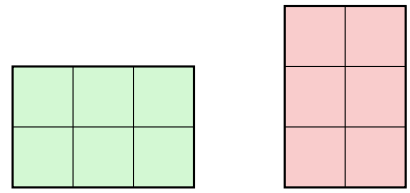
☐ A. It depends on the ribbon length.
☐ B. No, the first ribbon has more.
☐ C. Yes, both are the same.
☐ D. No, the second ribbon has more.

9) Eli covers a rectangle with unit tiles. It is 9 tiles long and 3 tiles wide. What is the area?

10) A rectangle is partitioned into two parts with areas 21 and 12. Both share a width of 3. Which equation uses the distributive property to add the two smaller areas?

☐ A. $3 \times (7 + 4) = 3 \times 11 = 33$
☐ B. $3 \times (7 + 4) = (3 \times 7) + (3 \times 4) = 21 + 12 = 33$
☐ C. $3 + 7 + 4 = 14$
☐ D. $(7 \times 4) + (3) = 31$

1)



Shape 1 Shape 2

Shape 1 has an area of 6 square units. Shape 2 has an area of 6 square units. Which statement is correct?

☐ A. Shape 1 is larger
☐ B. Shape 2 is larger
☐ C. Both shapes have the same area
☐ D. Shape 1 has no area

2) Mia tiles a rectangle that is 3 tiles wide and 6 tiles tall. Jordan tiles a rectangle that is 2 tiles wide and 9 tiles tall. Whose rectangle has a bigger area?

☐ A. Mia's rectangle
☐ B. Jordan's rectangle
☐ C. They have the same area
☐ D. Cannot tell from this information

3) Round 283 to the nearest 10.

☐ A. 280
☐ B. 283
☐ C. 290
☐ D. 300

4) A classroom floor is T-shaped. The top part is 6 units by 2 units. The bottom part is 4 units by 3 units. What is the total floor area?

☐ A. 24 sq units
☐ B. 12 sq units
☐ C. 36 sq units
☐ D. 30 sq units

5) In a multiplication table, the diagonal shows: $1 \times 1 = 1$, $2 \times 2 = 4$, $3 \times 3 = 9$, $4 \times 4 = 16$.
What is 5×5?

☐ A. 20
☐ B. 24
☐ C. 25
☐ D. 30

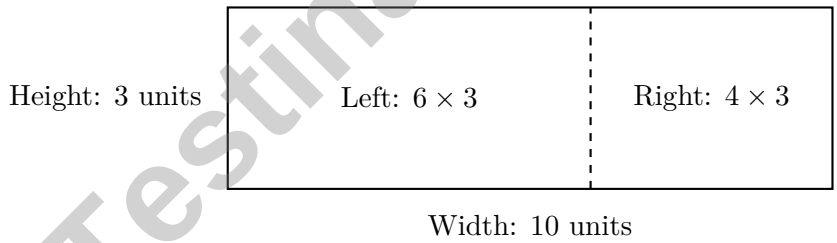
6) A floor tile is 1 inch by 1 inch. A floor has 8 rows and 6 tiles in each row. What is the area?

☐ A. 14 sq in
☐ B. 48 sq in
☐ C. 28 sq in
☐ D. 64 sq in

7) Which shape is NOT a quadrilateral?

☐ A. Parallelogram
☐ B. Triangle
☐ C. Rhombus
☐ D. Square

8) A rectangle is broken into two parts by a line:



Which sum of the two smaller areas gives the total area?

☐ A. $3 \times (6 + 4) = 30$
☐ B. $(3 \times 6) + (3 \times 4) = 18 + 12 = 30$
☐ C. $10 + 3 = 13$
☐ D. $6 + 4 = 10$

1) A toy store has 7 shelves with 9 toys on each shelf. How many toys are on all the shelves?

☐ A. 70 toys
☐ B. 56 toys
☐ C. 16 toys
☐ D. 63 toys

2) Kai saves 15 dollars from his allowance. His grandma gives him 20 dollars. He spends 18 dollars on a book. How much money does Kai have left?

☐ A. 12
☐ B. 15
☐ C. 17
☐ D. 23

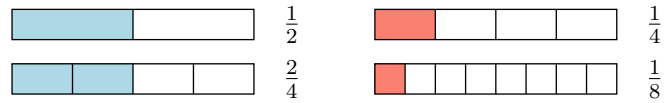
3) A line plot shows book page counts: $50, 50\frac{1}{2}, 51, 51\frac{1}{2}, 52$ pages. There are two X's at 50 pages, one X at $50\frac{1}{2}$ pages, four X's at 51 pages, one X at $51\frac{1}{2}$ pages, and one X at 52 pages. Which page count appears the least often?

☐ A. 50 pages
☐ B. $50\frac{1}{2}$ pages
☐ C. 51 pages
☐ D. 52 pages

4) A classroom floor is a rectangle. It is 8 meters long and 6 meters wide. How many square meters is the classroom floor?

☐ A. 14 square meters
☐ B. 48 square meters
☐ C. 28 square meters
☐ D. 56 square meters

5) Look at the fraction bars below. Which fractions are equivalent?



☐ A. $\frac{1}{2}$ and $\frac{1}{8}$
☐ B. $\frac{1}{4}$ and $\frac{1}{8}$
☐ C. $\frac{1}{2}$ and $\frac{2}{4}$
☐ D. $\frac{1}{4}$ and $\frac{2}{4}$

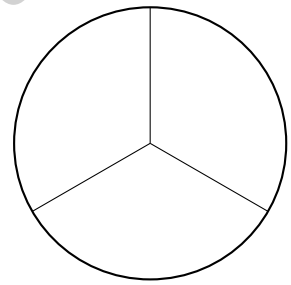
6) Find $18 \div 6$.

7) Lily has 20 stickers. She puts them in 4 equal groups. How many stickers are in each group?

☐ A. 5
☐ B. 4
☐ C. 6
☐ D. 24

8) Find $72 \div 9$.

9) A circle is divided into equal parts. Each part is $\frac{1}{3}$ of the circle. How many equal parts is the circle divided into?



☐ A. 2 parts
☐ B. 3 parts
☐ C. 4 parts
☐ D. 6 parts

Practice Test Answer Keys

How to use this section with a Grade 3 student:

1. check the answer first
2. mark questions to try again
3. rework the problem before reading the full explanation

A calm correction routine turns every missed item into useful practice.

Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

1) **Choice D is correct.** NC.3.OA.6 Divide: $15 \div 3 = 5$. Each unknown weight is 5. Check: $5 \times 3 = 15$.
2) **Choice A is correct.** NC.3.NF.1 The number line shows repeated subtraction of 3 four times, so $12 \div 3 = 4$.
3) **Choice C is correct.** NC.3.G.1 The four corner marks each show a right angle. This shape is a rectangle with 4 right angles.
4) **Choice D is correct.** NC.3.NBT.3 The point is at position 7 on the line from 0 to 10, which is past the midpoint of 5. It represents a number 450–499, closer to 500.
5) **Choice C is correct.** NC.3.NF.4 Strategy: same numerator (2), so compare denominators. Thirds are bigger pieces than fourths (a whole divided by 3 gives bigger parts than divided by 4). Visual check: the blue bar (2/3) covers more area than the bar would if it were 2/4. Rule: when numerators match, smaller denominator wins.
6) **Choice D is correct.** NC.3.MD.5 Area $= 10 \times 6 = 60$ square centimeters.
7) **Choice D is correct.** NC.3.NF.4 Count the rows: 3 rows. Count the columns: 4 columns. Multiply: $3 \times 4 = 12$ square units.
8) **Choice C is correct.** NC.3.NF.4 $\frac{3}{6} = \frac{1}{2}$ because both represent one-half of the ribbon.
9) **The correct answer is 27 square units.** NC.3.MD.5 $9 \times 3 = 27$ square units. That means 27 unit tiles cover the rectangle.
10) **Choice B is correct.** NC.3.MD.5 $21 = 3 \times 7$ and $12 = 3 \times 4$. The distributive property shows the total as $3 \times (7 + 4) = 33$.
11) **Choice C is correct.** NC.3.MD.5 Vertical part: $3 \times 8 = 24$ sq ft. Horizontal part: $5 \times 2 = 10$ sq ft. Total: $24 + 10 = 34$ sq ft.
12) **Choice D is correct.** NC.3.OA.8 9 boxes × 6 cupcakes per box = 54 cupcakes.
13) **Choice B is correct.** NC.3.MD.5 At $\frac{1}{4}$ inch there are 4 X's. At $\frac{1}{2}$ inch there are 2 X's. The difference is $4 - 2 = 2$ days.
14) **Choice D is correct.** NC.3.MD.5 Area = width × height $= 9 \times 7 = 63$ square inches.
15) **Choices A and B are correct.** NC.3.NF.3 $\frac{2}{6} = \frac{1}{3}$ because $\frac{2}{6}$ simplifies to $\frac{1}{3}$. They represent the same point, one-third of the way from 0 to 1. The other choices name different points.
16) **Choice A is correct.** NC.3.NF.1 When an orange is cut into 8 equal slices, one slice is $\frac{1}{8}$ (one-eighth).
17) **Choice B is correct.** NC.3.OA.3 Half of 300 mL is $300 \div 2 = 150$ mL.
18) **The correct answer is $\frac{1}{6}$.** NC.3.NF.1 When a circle is divided into 6 equal parts, each part is $\frac{1}{6}$ of the whole.
19) **Choice A is correct.** NC.3.MD.1 The minute hand points just past 1 (at 6 minutes), and the hour hand is just past 8.
20) **Choice D is correct.** NC.3.MD.5 $9 \times 4 = 36$ unit squares.
21) **Choice B is correct.** NC.3.NF.3 Pie 1 shows $\frac{1}{2}$ (half shaded) and Pie 3 shows $\frac{2}{4}$ (half shaded). Both represent the same amount: $\frac{1 \times 2}{2 \times 2} = \frac{2}{4}$.
22) **Choice C is correct.** NC.3.NF.4 $\frac{2}{4}$ and $\frac{1}{2}$ both equal half of a whole.
23) **The correct answer is 45 students.** NC.3.MD.3 Soccer: $4 \times 5 = 20$. Basketball: $3 \times 5 = 15$. Kickball: $2 \times 5 = 10$. Total: $20 + 15 + 10 = 45$.
24) **Choice C is correct.** NC.3.MD.7 Rectangle 1: $2 \times 9 = 18$ sq units. Rectangle 2: $3 \times ? = 18$. So $? = 18 \div 3 = 6$ units.
25) **Choice D is correct.** NC.3.OA.8 Step 1: Pages per chapter: $64 \div 8 = 8$ pages. Step 2: Pages read: $3 \times 8 = 24$ pages.
26) **Choice C is correct.** NC.3.MD.5 The garden is 6 m × 2 m = 12 m^2, which equals 12 unit squares of 1 m by 1 m.
27) **Choice A is correct.** NC.3.NBT.3 Add ones: $5 + 8 = 13$ (write 3, carry 1). Add tens: $4 + 1 + 1 = 6$. Add hundreds: $2 + 3 = 5$. Answer: 563.
28) **Choice D is correct.** NC.3.NBT.3 The commutative property of multiplication states that $a \times b = b \times a$. This is why $9 \times 2 = 2 \times 9 = 18$.
29) **Choice D is correct.** NC.3.OA.6 $18 \div 2 = \square$ means $\square \times 2 = 18$. Since $9 \times 2 = 18$, each bouquet has 9 flowers.

Hi, Math Builder!

◇ Through 10 practice tests, you built your math house brick by brick. The walls are strong. The roof is on. You are ready for anything test day brings. ◇

⋆ **Builders know:** good plans make strong houses. You learned to plan, then build. That helps with any problem. ⋆

Builder's Tools

- **Foundation:** ROCK SOLID. Math facts are in place.
- **Frame:** STRONG. You can break problems into parts.
- **Walls:** TIDY. Your work is neat and clear.
- **Roof:** DONE. You always answer the question.

Builder tip: on test day, build each answer like a tiny house. Read first. Plan next. Do the math. Then check!

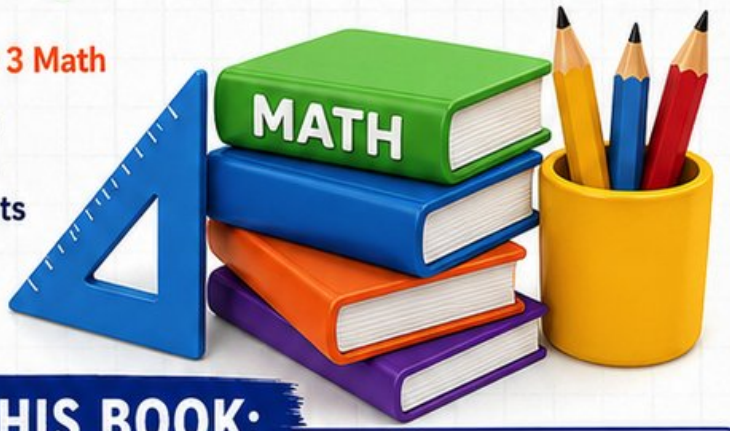
If you want to share something or ask a question, please email me at jay@testinar.com.

Jay Daie

Your Math Builder

PRACTICE TODAY. SUCCEED TOMORROW!

Give your child the advantage they need in Grade 3 Math with 10 full-length practice tests that build skills, boost confidence, and improve results. Designed to mirror real test formats, this book helps students master essential math concepts and feel ready for any challenge.



INSIDE THIS BOOK:

10 Full-Length Practice Tests

Realistic tests that simulate the look and feel of actual Grade 3 math assessments.

Standards-Aligned

Covers all essential Grade 3 math topics based on current learning standards.

Build Skills & Confidence

Strengthens problem-solving, critical thinking, and test-taking skills with every practice.

Track Progress & Improve

Identify strengths and weaknesses to focus on what matters most.

Prepare for Success

Better preparation leads to higher scores and brighter futures.

COVERS ALL KEY TOPICS

- Whole Numbers & Operations
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- Geometry
- Measurement & Data
- Graphing & Data Analysis
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- Word Problems
- Ratio & Proportion
- Perimeter, Area & Volume
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THE MORE THEY PRACTICE, THE BETTER THEY PERFORM.

Help your child build a strong foundation and achieve their best in math!

PRACTICE PREPARE SUCCEED!

Designed for Grade 3 Students

Build Strong Math Skills

Practice with Purpose