

7

South Dakota

Smarter Balanced

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



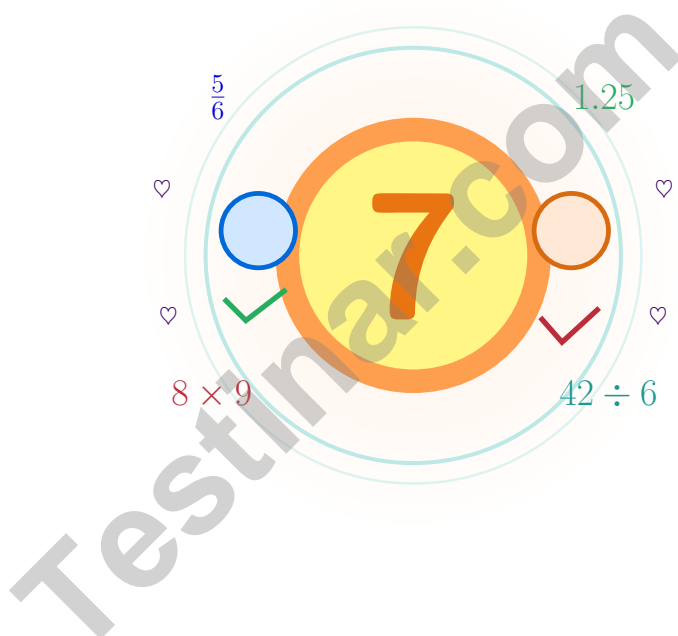
ACHIEVE SUCCESS

Develop skills,
stay prepared,
excel on test day

★ PRACTICE TODAY. PERFORM TOMORROW. **SUCCEED** FOREVER. ★

7 South Dakota Smarter Balanced Grade 5 Math Practice Tests

Seven full tests, seven lessons, one stronger mathematician



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

Jay Daie and Reza Nazari



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Open the Trail, South Dakota

Seven practice tests woven into one calm routine

Welcome Letter for South Dakota Math Trail Crew

This practice book is your steady companion for seven tests, not a place to be perfect. Math is like Mount Rushmore – big results come from small careful chips, day after day.

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 with care – math problems hide their gifts.

Try

Try a strategy that fits the size of the numbers.

Reflect

Reflect after each problem to lock the lesson in.

A strong habit for South Dakota 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.

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A Map of the Pages

A simple routine that turns practice into progress

Step 1: Notice

Notice the structure: warm-up, test, review, repair.

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

Step 2: Practice

Practice one full test in quiet conditions.

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

Step 3: Honest Check

Check honestly without rushing.

Circle missed questions and notice which topics keep showing up.

Step 4: Polish

Polish the rough spots before the next test.

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

A Good 7-Week South Dakota Rhythm

Week 1	Take Test 1 like a careful first chip on stone.
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 reveal the shape with calm, confident chips.



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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)

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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



1) Which expression equals 4.5?

A. $3,500 \div 10$

B. $450 \div 100$

C. $8,600 \div 1,000$

D. $1,200 \div 100$

2) Without calculating, compare: 2.5×8 2.5×8.5

A. $>$

B. $<$

C. $=$

 D. Cannot tell

3) A door is 7 feet tall. How many inches is that?

A. 96 inches

B. 80 inches

C. 72 inches

D. 84 inches

4) Prism: length 18 cm, width 7 cm, volume 630 cm^3 . Height =?

A. 126 cm

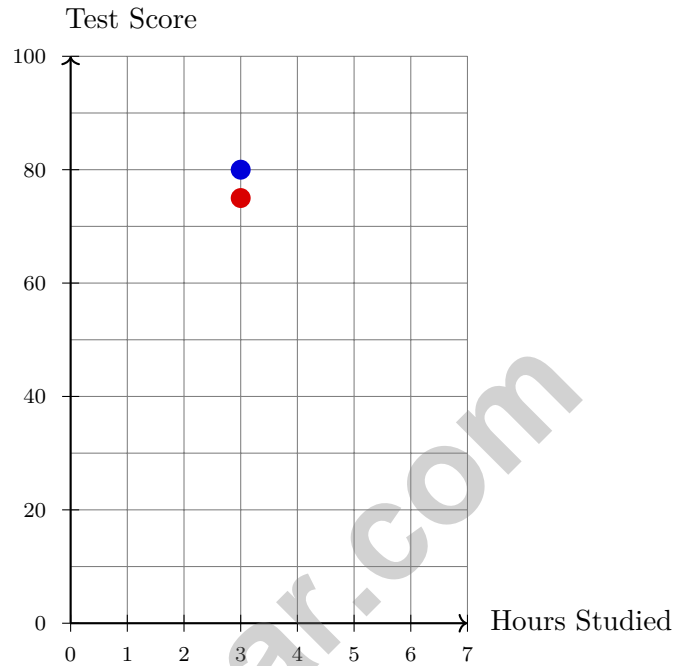
B. 25 cm

C. 612 cm

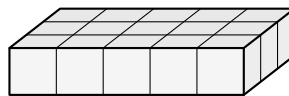
D. 5 cm



- 5) A survey plots the relationship between hours of study and test scores. Two students took 3 hours to study. One scored 75, the other scored 80. What are their coordinates?



- A. (3, 75) and (3, 80) C. (3, 155)
 B. (75, 3) and (80, 3) D. (75, 80)
- 6) A rectangular box is 5 units long, 3 units wide, and 1 unit tall. How many unit cubes does it contain?



- A. 8 unit cubes C. 12 unit cubes
 B. 15 unit cubes D. 20 unit cubes



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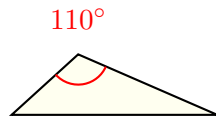
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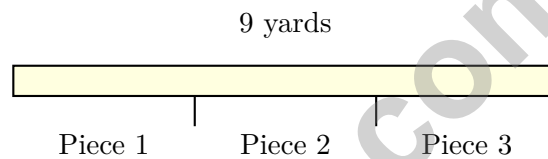
1 day = 24 hours (hr) 1 year = 52 weeks



- 1) Look at the triangle below. What type of angle is marked?



- A. Acute angle
- B. Right angle
- C. Obtuse angle
- D. Straight angle
- 2) A tailor is cutting a piece of fabric 9 yards long into equal pieces. If the fabric is cut into 3 pieces, how long is each piece in feet?
Use: 1 yard = 3 feet



- A. 3 feet
- B. 6 feet
- C. 9 feet
- D. 18 feet
- 3) Multiply and simplify: $8 \times \frac{1}{4}$
- A. $\frac{8}{5}$
- B. 2
- C. $\frac{1}{32}$
- D. 4
- 4) A jewelry item weighs 5.024 grams. Round to the nearest whole gram.
- A. 5 g
- B. 5.02 g
- C. 5.1 g
- D. 6 g



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1) Write 0.005 in word form.

- A. Five tenths
 B. Five hundredths
 C. Five thousandths
 D. Fifty thousandths

2) Estimate: $7\frac{1}{12} + 2\frac{11}{12}$.

- A. 9
 B. 10
 C. 11
 D. 12

3) Which prism has volume 252 in^3 ?

- A. Base 20 in^2 , height 12 in
 B. Base 42 in^2 , height 5 in
 C. Base 28 in^2 , height 8 in
 D. Base 36 in^2 , height 7 in

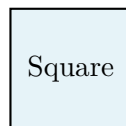
4) A camp is planning meals for 28 campers. Each camper eats $\frac{1}{4}$ of a sandwich. How many sandwiches are needed?

- A. 7 sandwiches
 B. 14 sandwiches
 C. 21 sandwiches
 D. 28 sandwiches

5) Multiply: $1\frac{1}{4} \times 1\frac{3}{5}$

- A. 3
 B. $2\frac{1}{20}$
 C. $1\frac{15}{20}$
 D. 2

6)



Which statement about a square is always true?

- A. It has exactly 3 sides.
 B. It has 4 equal sides and 4 right angles.
 C. It has no parallel sides.
 D. It is not a quadrilateral.



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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.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice B is correct.** (5.NBT.2) Check each quotient: $3,500 \div 10 = 350$, $450 \div 100 = 4.5$, $8,600 \div 1,000 = 8.6$, and $1,200 \div 100 = 12$.
- 2) **Choice B is correct.** (5.OA.2) Both expressions have the same factor, 2.5. Since 8 is less than 8.5, the product with 8 is smaller.
- 3) **Choice D is correct.** (5.MD.1) Since 12 inches = 1 foot, multiply 7 by 12: $7 \times 12 = 84$ inches.
- 4) **Choice D is correct.** (5.MD.4) The base area is $18 \times 7 = 126$ square centimeters. Since $630 \div 126 = 5$, the height is 5 cm.
- 5) **Choice A is correct.** (5.G.2) Both students studied for 3 hours (x-coordinate), but scored differently (75 and 80 on y-axis). Their points are (3, 75) and (3, 80).
- 6) **Choice B is correct.** (5.MD.4) A prism with height 1 has one layer. The layer is $5 \times 3 = 15$ cubes, so the box contains 15 unit cubes.
- 7) **Choice A is correct.** (5.MD.2) Count the X marks above each height. The height $2\frac{1}{4}$ cm has only 1 mark, so it is the least common.
- 8) **Choice C is correct.** (5.NF.5) Since $\frac{7}{8} < 1$, multiplying 20 by it gives a result smaller than 20. No computation needed!
- 9) **Choice D is correct.** (5.NBT.2) The blank must make the product end with exactly 2 zeros. $3 \times 200 = 600$, and 600 has exactly 2 zeros.
- 10) **Choice A is correct.** (5.G.2) Starting at (0,0), adding 2 to x and 1 to y each time gives (0,0), (2,1), (4,2), (6,3). Graph A shows those points.
- 11) **Choice C is correct.** (5.OA.3) List the doubles carefully: 1st is 1, 2nd is 2, 3rd is 4, 4th is 8, 5th is 16, 6th is 32, and 7th is 64.
- 12) **The correct answer is 1.** (5.G.4) The description says exactly one pair of parallel sides, so the answer is 1 pair.
- 13) **Choice A is correct.** (5.OA.1) Simplify both groups first: $8 + 2 = 10$ and $6 - 3 = 3$. Multiply to get 30, then subtract 10 to get 20.
- 14) **The correct answer is 10.** (5.OA.2) The expression $(45 - 9)$ is the original amount. Multiplying it by 10 makes 10 copies of that amount.
- 15) **Choice D is correct.** (5.NF.6) The model asks how many one-third pieces fit in 5 wholes. So the matching equation is $5 \div \frac{1}{3} = n$.
- 16) **Choice B is correct.** (5.MD.4) Volume = $30 \times 25 \times 8 = 6000$ cubic feet.
- 17) **Choice C is correct.** (5.MD.1) Choose the operation from the story, then keep the unit with the answer. Subtract: $64.75 - 8.50 = 56.25$ dollars. This confirms the answer.
- 18) **Choice C is correct.** (5.MD.4) Volume = $7 \times 6 \times 4 = 42 \times 4 = 168 \text{ cm}^3$.
- 19) **Choices A, B are correct.** (5.MD.1) A is correct: 1 m = 100 cm. B is correct: 1 km = 1,000 m. C is incorrect: 1 L = 1,000 mL (not 10). D is incorrect: 1 kg = 1,000 g (the relationship is reversed).
- 20) **Choice C is correct.** (5.NF.1) $\frac{4}{8} = \frac{4 \div 4}{8 \div 4} = \frac{1}{2}$. In simplest form, this is one half of the inventory.
- 21) **Choice C is correct.** (5.NF.5) Only $\frac{5}{7} < 1$. The others equal 1 or exceed 1, so their products would be ≥ 28 .
- 22) **Choice D is correct.** (5.NBT.1) The chart shows 0 ones, 6 tenths, 0 hundredths, and 9 thousandths: $0 + 0.6 + 0 + 0.009 = 0.609$.
- 23) **Choice D is correct.** (5.MD.5) The base area is $10 \times 6 = 60$ square feet. Since $360 \div 60 = 6$, the locker is 6 ft tall.
- 24) **The correct answer is $3 \times (9 + 12)$.** (5.OA.2) The words "the sum of 9 and 12" mean $9 + 12$ should be grouped before multiplying by 3.
- 25) **Choice A is correct.** (5.G.4) All three angles (30° , 70° , 80°) are less than 90 degrees, making this an acute triangle.
- 26) **Choice C is correct.** (5.NF.7) $3 \div \frac{1}{4} = 3 \times 4 = 12$.
- 27) **Choice C is correct.** (5.NBT.2) The exponent tells the number of zeros, and each power adds one more zero.
- 28) **Choice C is correct.** (5.NBT.7) Add dollars and cents by place value: $3.68 + 2.47 = 6.15$. The total cost is \$6.15.
- 29) **Choice A is correct.** (5.NBT.2) A is correct. B equals 0.054, C is wrong, and D equals 0.054.



Dear Student,

★ Seven practice tests taught you something bigger than math: persistence. Persistence is the habit of continuing even when something feels difficult. ★

◇ **A growth mindset says:** “I can’t do it yet.” That tiny word—yet—changes everything. ◇

Growth Statements

- **Instead of:** “I’m bad at this.” **Say:** “I’m learning this.”
- **Instead of:** “This is too hard.” **Say:** “I’ll try one step.”
- **Instead of:** “I made a mistake.” **Say:** “Now I know what to fix.”
- **Instead of:** “I’m stuck.” **Say:** “I’ll come back with a plan.”

Keep going. You proved you can improve—seven times.

Email me at reza@testinar.com.

Reza Nazari & Jay Daie

Your Math Coaches (Keep Growing)

Testinar.com

PRACTICE TODAY. PERFORM TOMORROW.

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.

KEY BENEFITS:



TARGETED PRACTICE

Focus on the most important Grade 5 math skills.



STANDARD-ALIGNED

All tests align with state standards for Grade 5.



BUILD CONFIDENCE

Strengthen skills, reduce test anxiety, and boost confidence.



IMPROVE PERFORMANCE

Timed practice helps improve speed and accuracy.



ACHIEVE SUCCESS

Develop strong test-taking skills and achieve your best score!

PERFECT FOR:

✓ Classroom Practice

✓ Homework Help

✓ Test Preparation

✓ Summer Learning

✓ On-the-Go Practice

✓
PRACTICE
PREPARE
SUCCEED



STRONG SKILLS. BRIGHT FUTURE.

Give your child the tools they need to succeed in math and in life!



Visit testinar.com/math5 for more Grade 5 math resources and practice materials!



TRUSTED
BY PARENTS

Quality resources you can trust.



DESIGNED
FOR SUCCESS

Proven practice for real results.



SUPPORT
YOUR CHILD

Every step of the way.