

4 South Dakota Smarter Balanced

GRADE
6
MATH

PRACTICE TESTS

Standards Aligned Problem Solving
For Comprehensive Assessment Programs

4

PRINTED
TESTS



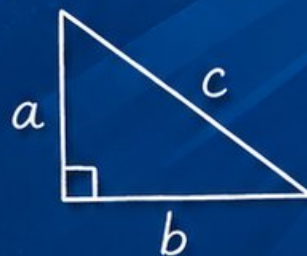
2

ONLINE
TESTS



- ✓ Build Confidence
- ✓ Master Key Math Skills
- ✓ Answer Explanations for Every Question
- ✓ Test-Taking Strategies That Work

$$2x + 5 = 21$$
$$x = 8$$



$$\frac{3}{4} + \frac{1}{2} = \frac{5}{4}$$

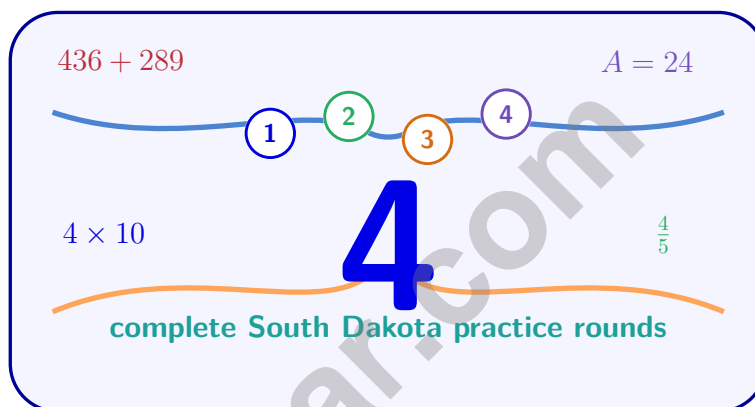


USE THESE TWO
**ADDITIONAL ONLINE
PRACTICE TESTS**

FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.

4 South Dakota Smarter Balanced Grade 6 Math Practice Tests

Standards-Aligned Prairie-And-Ridge Review for Smarter Balanced Assessment Consortium



Four complete 40-question Grade 6 practice rounds for Smarter Balanced, built for prairie-and-ridge review with ratios, rational numbers, expressions, equations, geometry, statistics, answer keys, and clear explanations for every item.

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Welcome, South Dakota Math Explorer!

Four focused rounds using prairie-and-ridge review

This book gives you four full Grade 6 practice tests for Smarter Balanced. Each round uses open prairie, carved hills, and steady problem checks as a fresh mental backdrop while you read closely, choose a smart strategy, show your work, and check whether your answer makes sense.

Your South Dakota Practice Promise

Use wide-open thinking: mark what matters, solve in order, and check if the answer is reasonable.

Read

Plan

Check

How to Use This Book

A four-session routine for prairie-and-ridge review

1. **Work in order.** Take one 40-question test at a time in a quiet place.
2. **Preview the skills.** Scan the quick review pages before beginning the first round.
3. **Correct actively.** Retry missed items before reading the full explanation.
4. **Mark confidence.** Put a small star beside problems where your plan felt strong.
5. **Plan the next round.** Use the growth log to choose one habit and one skill to practice.

South Dakota review rhythm: Complete a round, review the hard hills, and start the next test with a clearer plan.



What Is Inside?

Four Smarter Balanced tests, 160 questions, and a full review path

Part	What You Will Practice
Tests 1–2	Foundation rounds for ratios, rational numbers, operations, and careful reading.
Tests 3–4	Skill-building and final stamina rounds with expressions, equations, geometry, data, and problem models.
Answer Pages	Compact keys and explanations that show why each answer works.

The tests are mixed on purpose. Prairie-and-ridge review means recognizing the skill even when the next question changes topic, changes format, or asks for an explanation.



Scan me!
For more practice
& answers

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1) A student earns \$8 per hour. If the student works h hours, which expression shows the total earnings?

A. $h + 8$

B. $h - 8$

C. $8h$

D. $\frac{8}{h}$

2) A student mistakenly plotted $(4, -3)$ in Quadrant III. What is the correct quadrant for this point?

 A. Quadrant I B. Quadrant II C. Quadrant III D. Quadrant IV

3)

Player	Score
Alice	8
Bob	-3
Carol	5
David	-1

Who has the lowest score?

 A. Alice B. David C. Carol D. Bob

4) The distance between points $(4, 5)$ and $(4, y)$ is 7 units. The points have the same x -coordinate. What could y be?

A. $y = -3$ or $y = 12$

B. $y = -2$ or $y = 12$

C. $y = -1$ or $y = 11$

D. $y = 0$ or $y = 10$



5) What is $-7 + 3$?

A. -10

B. -4

C. 4

D. 10

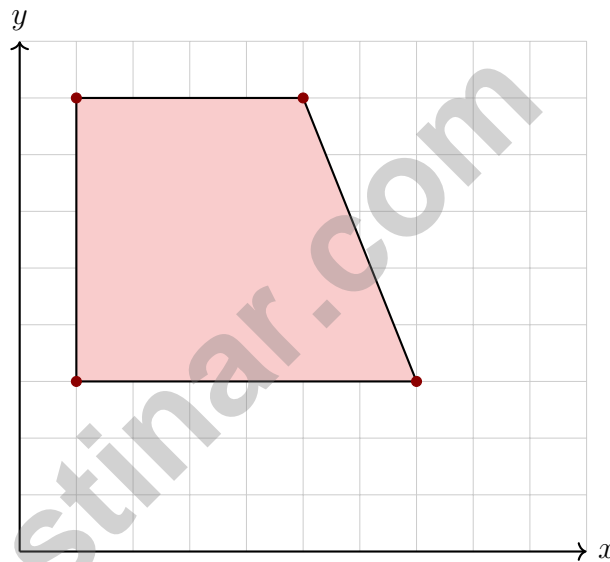
6) Compute: $\frac{-45}{5}$

A. 9

B. -40

C. 40

D. -9



7)

What is the length of the top side?

A. 4 units

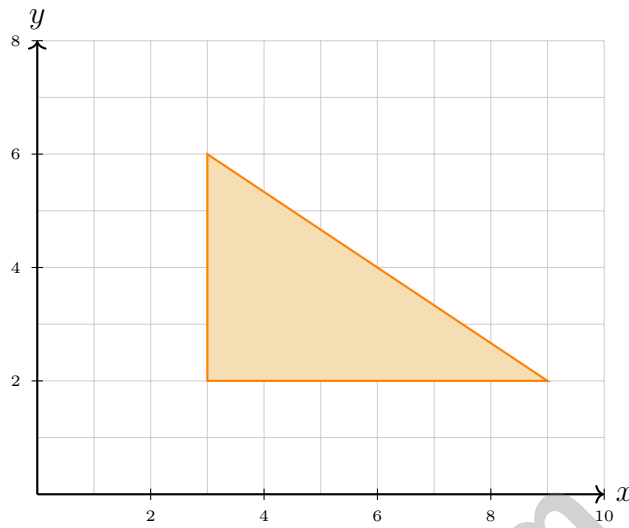
B. 5 units

C. 6 units

D. 7 units



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8)

Find the area of the right triangle with vertices at $(3, 2)$, $(9, 2)$, and $(3, 6)$.

- A. 10 square units C. 14 square units
 B. 12 square units D. 16 square units

9) A rectangular prism has length 8 m, width 4 m, and height 3 m. Find the surface area.

- A. 96 m^2 C. 192 m^2
 B. 152 m^2 D. 288 m^2



5) A standard six-sided die is rolled. What is the probability of rolling a number less than or equal to 4?

- A. $\frac{1}{6}$
 C. $\frac{2}{3}$
 B. $\frac{1}{3}$
 D. $\frac{5}{6}$

6) A student creates a stem-and-leaf plot with stems 3, 4, 5 and forgets to order the leaves. The correct ordered plot should have leaves from smallest to largest. Which plot shows an ordering error?

Incorrect	Stem	Correct
3, 7, 5	2	3, 5, 7
9, 2, 6	3	2, 6, 9

What is the error in the incorrect plot?

- A. Stems are not ordered
 D. Leaves are not ordered from smallest to largest
 B. The first leaf should be a stem
 C. Too many leaves in stem 3
- 7) A store inventory has 900 items. The circle graph shows $\frac{2}{9}$ are on clearance. How many items are on clearance?

- A. 180
 C. 220
 B. 200
 D. 240

8) A class collected data on rainfall (in inches) for each day of the week. Which display would BEST show if certain days had significantly more or less rain than others?

- A. Pie chart divided by day
 C. Dot plot of individual measurements
 B. Line graph connecting consecutive days
 D. Bar graph with one bar per day



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3) A fabric costs \$8.50 per meter. How much does 2.5 meters cost?

- A. \$21.25 C. \$5.75
 B. \$10.75 D. \$20.00

4) Find the LCM of 12 and 15 using the table below.

Multiples of 12	12	24	36	48	60	72
Multiples of 15	15	30	45	60	75	90

- A. 30 C. 48
 B. 36 D. 60

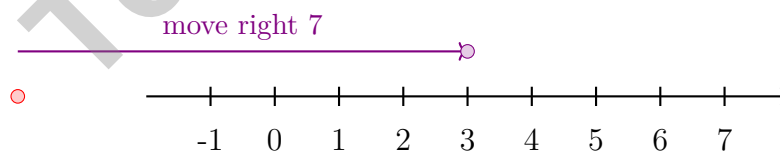
5) Which expression is equivalent to $18 + 24$ using the distributive property?

- A. $6(3 + 4)$ C. $2(9 + 24)$
 B. $6(3 + 24)$ D. $3(6 + 8)$

6) A park ranger uses a map where $(5, 3)$ marks the trail start and $(5, 9)$ marks the trail end. The scale is 1 unit = 150 meters. What is the length of the trail in meters?

- A. 600 m C. 900 m
 B. 750 m D. 1050 m

7) What is $-4 - (-7)$?



- A. -11 C. 3
 B. -3 D. 11



South Dakota Smarter Balanced Practice Test Answer Keys

How to use this South Dakota Smarter Balanced answer section with a Grade 6 student:

1. check the answer first, then write one quick reason the choice is correct
2. mark questions to try again, especially the skills that feel connected to prairie-and-ridge review
3. rework the problem before reading the full explanation, using this reminder:
Use wide-open thinking: mark what matters, solve in order, and check if the answer is reasonable.

A calm South Dakota correction routine turns every missed item into useful practice. Complete a round, review the hard hills, and start the next test with a clearer plan.



South Dakota Practice Test Answers and Explanations

Review the four printed Smarter Balanced tests with patient, clear, and ready for the next climb habits.

Practice Test 1 Answers and Explanations

- 1) **Choice C is correct.** **(6.EE.6)** Earnings = hourly rate \times hours worked = $8 \times h = 8h$.
- 2) **Choice D is correct.** **(6.NS.8)** The point $(4, -3)$ has a positive x -coordinate and negative y -coordinate, placing it in Quadrant IV (lower right). The student likely confused the quadrants.
- 3) **Choice D is correct.** **(6.NS.7)** Bob has a score of -3 , which is the lowest of all scores: $-3 < -1 < 5 < 8$.
- 4) **Choice B is correct.** **(6.NS.8)** Since $|5 - y| = 7$, then $y = 5 - 7 = -2$ or $y = 5 + 7 = 12$.
- 5) **Choice B is correct.** **(6.NS.3)** Start at -7 on a number line and move 3 units right: $-7 + 3 = -4$.
- 6) **Choice D is correct.** **(6.NS.3)** Negative divided by positive is negative: $\frac{-45}{5} = -9$.
- 7) **Choice A is correct.** **(6.G.3)** The top goes from $(1, 8)$ to $(5, 8)$. Length = $5 - 1 = 4$ units.
- 8) **Choice B is correct.** **(6.G.1)** Base: $9 - 3 = 6$ units. Height: $6 - 2 = 4$ units. Area = $\frac{1}{2} \times 6 \times 4 = 12$ square units.
- 9) **Choice B is correct.** **(6.G.4)** $SA = 2(8)(4) + 2(8)(3) + 2(4)(3) = 64 + 48 + 24 = 152 \text{ m}^2$.
- 10) **Choice D is correct.** **(6.NS.8)** If the image is $(6, -4)$ after reflection over the x -axis, the original point is $(6, 4)$ (negate y again to find the original).
- 11) **Choice D is correct.** **(6.RP.1)** The diameter is 14 inches, so the radius is $r = 7$ inches. Area = $\pi r^2 = \pi \times 7^2$.
- 12) **Choice B is correct.** **(6.RP.3)** Divide: $16 \text{ m} \div 8 \text{ cm} = 2 \text{ m per cm}$. Scale is $1 \text{ cm} = 2 \text{ m}$.
- 13) **Choice A is correct.** **(6.EE.4)** Sum: $6 + 2 + (-4) = 4$. Note: when including negative coefficients, add them with their signs.
- 14) **Choice B is correct.** **(6.G.1)** Rearranging: $56 = \frac{1}{2} \times b \times 7 \Rightarrow b = 16 \text{ cm}$.
- 15) **Choice C is correct.** **(6.G.2)** Using $V = L \times W \times H$, we have $V = 5 \times 2 \times 3 = 30 \text{ cm}^3$.
- 16) **Choice A is correct.** **(6.EE.9)** The constant ratio is $\frac{9}{3} = 3$. Since the line passes through the origin, the equation is $y = 3x$ with no constant term.
- 17) **Choice C is correct.** **(6.EE.9)** Person A: 20% of $\$800 = 0.20 \times 800 = \160 . Person B: 40% of $\$400 = 0.40 \times 400 = \160 . Both save $\$160$.
- 18) **The correct answer is 25%.** **(6.RP.3)** Increase is $93.75 - 75 = 18.75$. Percent increase is $\frac{18.75}{75} = 0.25 = 25\%$.
- 19) **Choice B is correct.** **(6.NS.1)** $\frac{4}{7} \times \frac{7}{2} = \frac{28}{14} = 2$.
- 20) **Choice A is correct.** **(6.NS.2, 6.NS.3)** $5,832 \div 27 = 216$. Check: $27 \times 216 = 5,832$.
- 21) **The correct answer is 9.** **(6.RP.3)** Ratio $5 : 3$ with 15 red marbles: each part is $15 \div 5 = 3$ marbles. Blue marbles: $3 \times 3 = 9$.
- 22) **The correct answer is The constant of proportionality is 4, and the cost per unit is \$4.** **(6.RP.3)** A is correct because $k = \frac{8}{2} = 4$. B is correct because the cost per unit is $\$4$. The equation is $y = 4x$, so Choice C is false; Choice D is false because the graph passes through $(0, 0)$; Choice E gives the wrong unit rate.
- 23) **Choice A is correct.** **(6.NS.3)** Subtract: $0.15 - 0.08 = 0.07$ meters. Align decimal points.
- 24) **Choice A is correct.** **(6.NS.4)** $48 = 16 \times 3 = 2 \times 2 \times 2 \times 2 \times 3 = 2^4 \times 3$. Option B uses composite 6; C and D use composite factors.
- 25) **Choice B is correct.** **(6.EE.3)** GCF of 15 and 10 is 5. Thus $15 + 10 = 5(3 + 2)$. Choice A uses factor 3 (not the greatest); Choice C uses 2 (not a common factor of both); Choice D uses 10 but yields 30, not 25.
- 26) **Choice B is correct.** **(6.NS.5)** A loss is a negative change. Losing 15 yards means the team moved 15 yards backward, represented by the integer -15 .



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& answers

Cheer Squad Final Pep Talk

Hi, Math Star!

◇ 4 practice tests! That's a LOT of work, and you did it ALL. I am cheering so loud right now. You earned every clap and every cheer! ◇

★ **Cheerleader truth:** confidence is built by showing up. You showed up 4 times. That's real confidence. It is not pretend! ★

Cheer Roll Call

- **Effort:** 100% YOU SHOWED UP!
- **Heart:** BIG!
- **Skills:** STRONG and growing!
- **Spirit:** BRIGHT!

Cheer tip: on test day, be your own cheerleader. Whisper to yourself: "I can do this. I practiced." Tiny cheers make a big difference!

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

Jay Daie

Your Math Cheerleader

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes 4 full-length Math practice tests and 2 online tests to help Grade 6 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:

4 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 & Rates
- ✓ Percents
- ✓ The Number System
- ✓ Statistics & Probability
- ✓ Expressions & Equations
- ✓ Data Analysis
- ✓ Geometry
- ✓ Measurement & Conversions
- ✓ Fractions & Decimals
- ✓ And More!



2 ONLINE TESTS

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



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