

6

NEVADA

Smarter Balanced

GRADE

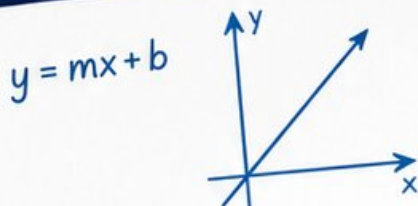
7

MATH

PRACTICE TESTS



Standards Aligned
Problem Solving For
Comprehensive
Assessment Programs



$$2(x - 3) = 4x + 6$$

6 PRINTED TESTS



2 ONLINE TESTS



USE THESE TWO
ADDITIONAL ONLINE
PRACTICE TESTS
FOR EXTRA REVIEW AFTER
THE PRINTED TESTS
IN THIS BOOK.



Build
Confidence



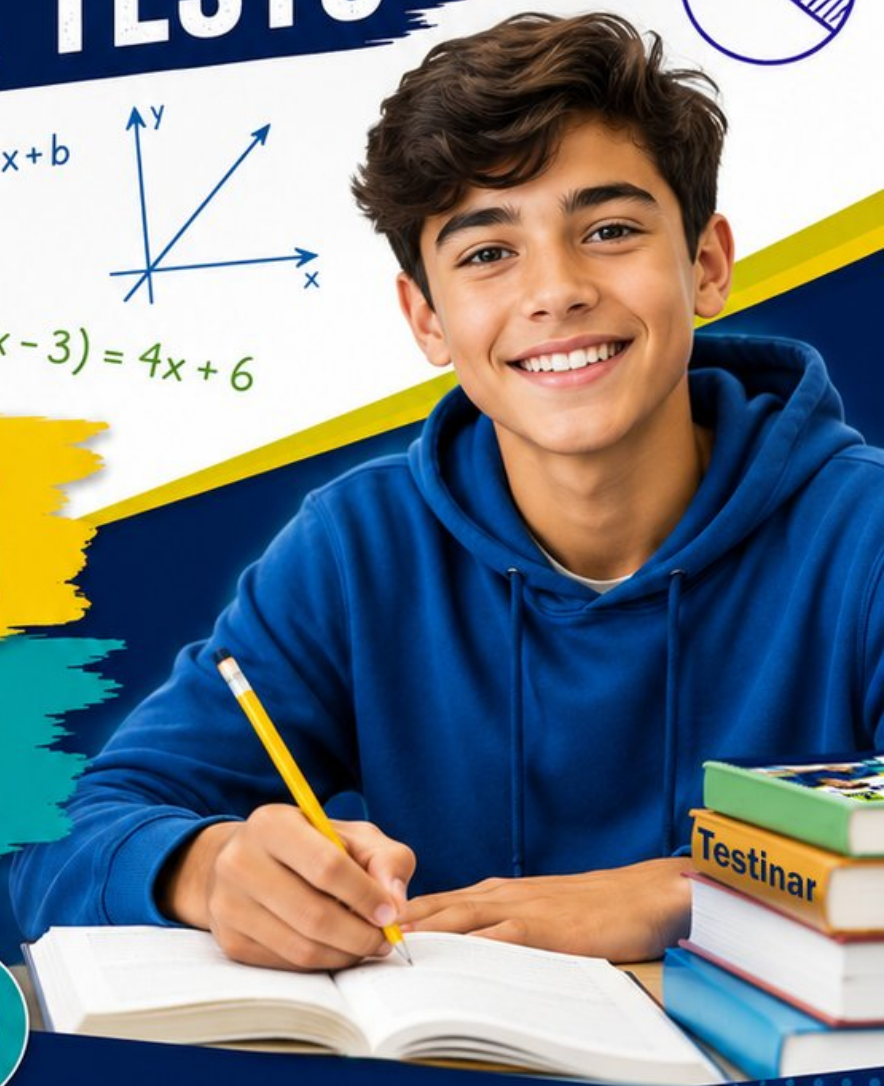
Strengthen
Math Skills



Detailed Answers
& Explanations

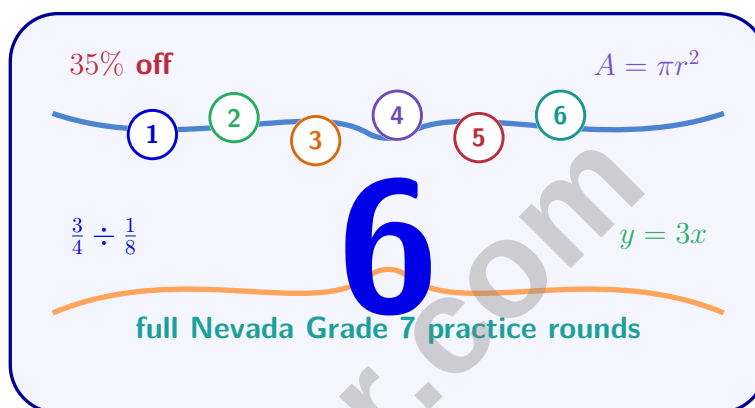


Improve Test
Performance



6 Nevada Smarter Balanced Grade 7 Math Practice Tests

Standards-Aligned Practice with Review, Answer Keys, and Explanations



Six complete 40-question Grade 7 Smarter Balanced 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, Nevada Grade 7 Problem Solver!

Six focused rounds for sharper Smarter Balanced math thinking

This book gives you six full Grade 7 Smarter Balanced 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 Nevada 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 six-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.

Nevada 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?

Six Smarter Balanced tests, 240 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.
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	_____	47
★ Practice Test 4	_____	61
★ Practice Test 5	_____	75
★ Practice Test 6	_____	89
Practice Test Answer Keys	_____	104
Practice Test Answers and Explanations	_____	108

- 1) A trapezoidal prism has a trapezoidal base with parallel sides 4 cm and 6 cm and a height of 3 cm (height of the trapezoid). The depth of the prism is 10 cm. What is the volume? (Area of trapezoid = $\frac{1}{2}(b_1 + b_2) \times h$)

☐ A. 60 cm³
☐ C. 150 cm³
☐ B. 75 cm³
☐ D. 300 cm³

$$3 \times \begin{array}{|c|c|} \hline 2x & 1 \\ \hline \end{array}$$

2)

$$3(2x + 1) = 21$$

Solve for x : $3(2x + 1) = 21$

☐ A. $x = 2$
☐ C. $x = 4$
☐ B. $x = 3$
☐ D. $x = 5$

- 3) A store charges \$12 per shirt. Create a table for 1, 2, 3, and 4 shirts. Does this represent a proportional relationship?

Shirts	1	2	3	4
Cost (\$)	12	24	36	48

☐ A. Cannot determine

☐ C. Yes, constant ratio is 1

☐ B. No, the cost increases too fast

☐ D. Yes, constant ratio is 12


Scan me!
For more practice
& answers



- 8) A scatter plot shows the relationship between the price of a bicycle (x-axis, in dollars) and the number sold per month (y-axis). The points show a downward trend. What does this suggest?
- ☐ A. Expensive bikes never sell ☐ C. Price and sales are unrelated
☐ B. Lower-priced bikes tend to sell more ☐ D. The store should lower all prices
- 9) A deck contains 52 cards: 13 hearts, 13 diamonds, 13 clubs, and 13 spades. A card is drawn at random. What is the probability of drawing a heart or a diamond?
- ☐ A. $\frac{1}{4}$ ☐ C. $\frac{3}{13}$
☐ B. $\frac{1}{2}$ ☐ D. $\frac{1}{3}$
- 10) A person selects a main color (Red, Blue) and a secondary color (Yellow, Green, Purple). How many color combinations are possible?
- ☐ A. 5 ☐ C. 7
☐ B. 6 ☐ D. 8
- 11) Two events A and B are independent. $P(A) = \frac{1}{2}$ and $P(B) = \frac{1}{3}$. What is $P(A \text{ or } B)$?
- ☐ A. $\frac{2}{5}$ ☐ C. $\frac{5}{6}$
☐ B. $\frac{2}{3}$ ☐ D. $\frac{1}{6}$



Scan me!
For more practice
& answers

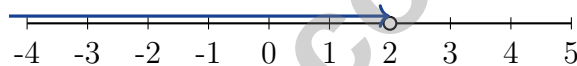
- 1) Two savings plans are compared over 2 years. Plan X deposits \$1,100 at 4% compound; Plan Y deposits \$1,000 at 6% compound. Which plan has a greater final balance, and by approximately how much?

- ☐ A. Plan X by \$66 ☐ C. Plan X by \$10
☐ B. Plan Y by \$66 ☐ D. Plan Y by \$10

- 2) A membership fee was \$200 per year. This year it was raised by 12%. How much is the new fee?

- ☐ A. \$212 ☐ C. \$224
☐ B. \$220 ☐ D. \$232

- 3) What inequality does this number line represent?



- ☐ A. $x > 2$ ☐ C. $x \leq 2$
☐ B. $x < 2$ ☐ D. $x \geq 2$

- 4)

Trial	1	2	3	4	5
Successes	22	28	25	27	23
Trials per Run	100	100	100	100	100

Five separate simulations each perform 100 trials and record the number of successes. What is the average estimated probability across all five simulations?

- ☐ A. 0.23 ☐ C. 0.27
☐ B. 0.25 ☐ D. 0.30



Scan me!
For more practice
& answers

5) A spinner with 4 equal sections (1, 2, 3, 4) is spun, and a coin is flipped. How many favorable outcomes result in spinning a number greater than 2 and flipping Heads?

☐ A. 1

☐ C. 4

☐ B. 2

☐ D. 8

6) Which of the following describes mutually exclusive events?

☐ A. Rolling a 3 AND rolling an even number on one die roll

☐ C. Drawing a heart AND drawing a face card

☐ B. Spinning red AND spinning blue on one spinner

☐ D. Flipping heads AND flipping tails on one coin flip

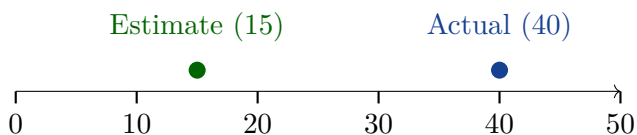
7) Students were surveyed about after-school activities. The data:

Activity	Sports	Music	Art	Drama
Count	72	48	36	24

Based on this data, what is the experimental probability that a randomly selected student participates in either music or art?

☐ A. $\frac{48}{180}$
☐ C. $\frac{48}{84}$
☐ B. $\frac{84}{180}$
☐ D. $\frac{60}{180}$

8) **Number Line of Estimates**



An estimate is 15, and the actual value is 40. What is the percent error?

☐ A. 62.5%

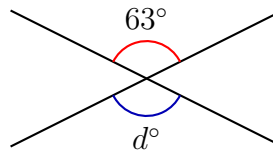
☐ C. 25%

☐ B. 37.5%

☐ D. 166.7%


1)

Outcome	1	2	3	4
Probability	0.1	0.3	0.4	0.2

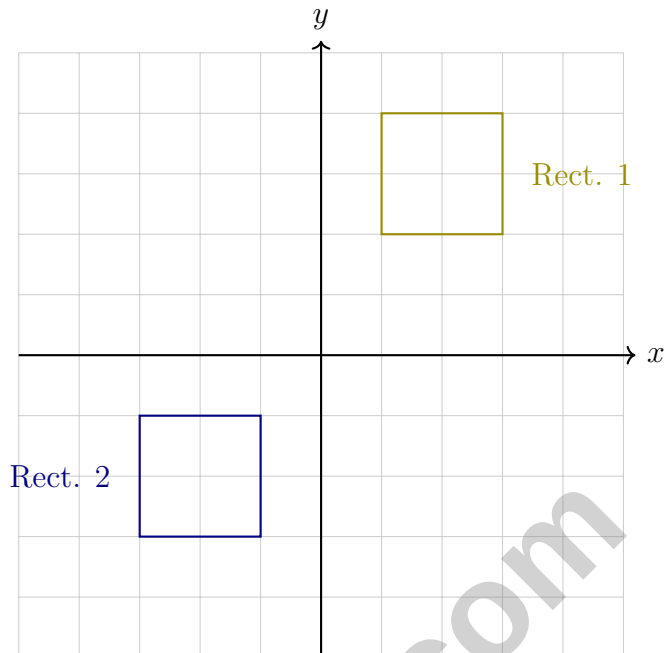
Find $P(1 \text{ or } 2)$.☐ A. 0.4☐ C. 0.1☐ B. 0.3☐ D. 0.7

2)

Two lines intersect. One angle measures 63° . What is the measure of the vertically opposite angle d ?

☐ A. 27° ☐ C. 117° ☐ B. 63° ☐ D. 153° 

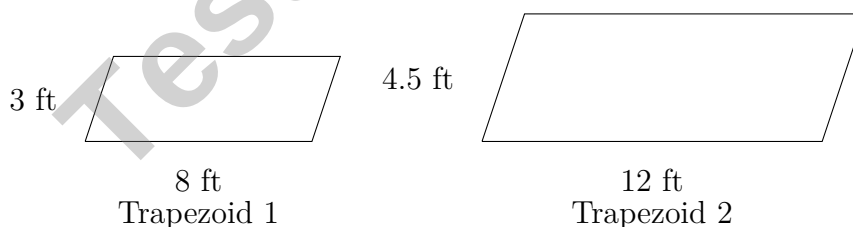
Scan me!
For more practice
& answers



3)

Rectangle 1 is transformed to Rectangle 2. What single transformation maps Rectangle 1 to Rectangle 2?

- ☐ A. Translation by $(-4, -3)$
☐ C. Reflection over the line $y = -1$
☐ B. Rotation of 180° about the origin
 ☐ D. Reflection over the y -axis



4)

These similar trapezoids have heights of 3 ft and 4.5 ft. If Trapezoid 1 has a base of 8 ft, what is the base of Trapezoid 2?

- ☐ A. 10 ft
 ☐ C. 12 ft
☐ B. 11 ft
 ☐ D. 14 ft



Nevada Smarter Balanced 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 Nevada Smarter Balanced practice test.

Testinar.com



Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **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 = $15 \times 10 = 150 \text{ cm}^3$.
- 2) **Choice B is correct.** (7.EE.4a) Distribute: $6x + 3 = 21$. Subtract 3: $6x = 18$. Divide by 6: $x = 3$.
- 3) **Choice D is correct.** (7.RP.1-7.RP.3) Each ratio: $12/1 = 12, 24/2 = 12, 36/3 = 12, 48/4 = 12$. Constant rate of \$12 per shirt.
- 4) **Choice C is correct.** (7.G.1-7.G.5) The third side c must satisfy $|12 - 5| < c$, so $c > 7$. The smallest whole number greater than 7 is 8.
- 5) **Choice C is correct.** (7.G.4-7.G.6) $SA = 2(16 \cdot 8 + 16 \cdot 2 + 8 \cdot 2) = 2(128 + 32 + 16) = 2(176) = 352 \text{ in}^2$.
- 6) **Choice B is correct.** (7.SP.1-7.SP.4) A random sample of all rental addresses (not just one complex) ensures all neighborhoods and rent levels are represented, avoiding bias.
- 7) **Choice B is correct.** (7.SP.1-7.SP.4) Range only tells the difference between max and min. IQR and MAD show how data is distributed within that range, distinguishing clustered from spread-out data with the same range.
- 8) **Choice B is correct.** (7.SP.1-7.SP.4) A downward trend means that as price increases, sales tend to decrease. This is a negative association, not a guarantee or causal statement.
- 9) **Choice B is correct.** (7.SP.5-7.SP.8) Hearts + diamonds = $13 + 13 = 26$. $P(\text{heart or diamond}) = \frac{26}{52} = \frac{1}{2}$.
- 10) **Choice B is correct.** (7.SP.5-7.SP.8) Main colors: 2; secondary colors: 3. Total: $2 \times 3 = 6$ combinations.
- 11) **Choice C is correct.** (7.SP.5-7.SP.8) For independent events: $P(A \text{ or } B) = P(A) + P(B) - P(A) \cdot P(B) = \frac{1}{2} + \frac{1}{3} - \frac{1}{6} = \frac{5}{6}$.
- 12) **Choice C is correct.** (7.SP.1-7.SP.4) Scores in range $[72, 86]$: 72, 72, 74, 78, 81, 83, 86 (from stems 7 and 8). Total: 7 scores.
- 13) **Choice B is correct.** (7.SP.6) Experimental probability = $\frac{850}{1000} = 0.85$.
- 14) **Choice B is correct.** (7.SP.5-7.SP.8) The marked position is at 0.2. Rolling a 6 on a standard die has probability $\frac{1}{6} \approx 0.167 \approx 0.2$.
- 15) **Choice C is correct.** (7.SP.1-7.SP.4) $\frac{84}{200} = \frac{x}{50000}$. Reduce: $\frac{21}{50} = \frac{x}{50000} \Rightarrow x = 21000$.
- 16) **Choice D is correct.** (7.RP.3) Percent error = $\frac{|35-40|}{40} \times 100\% = \frac{5}{40} \times 100\% = 12.5\%$.
- 17) **Choice B is correct.** (7.EE.1-7.EE.2) First add the markup: $(c+5)$. Then multiply by 3: $3(c+5) = 3c+15$. Distribute to both terms.
- 18) **Choice D is correct.** (7.RP.3) $I = 15000 \times 0.07 \times 6 = \6300 .
- 19) **Choice D is correct.** (7.NS.1-7.NS.3) $11 - (-6) = 11 + 6 = 17$.
- 20) **The correct answer is A,C.** (7.G.1-7.G.5) A: Two triangles with the same three side lengths are congruent by SSS. C: Two triangles with two equal sides and an equal included angle are congruent by SAS. B is incorrect because AAA determines similarity, not congruence (triangles can be different sizes). D is incorrect because two angles and two separate sides (not necessarily properly positioned) do not guarantee congruence.
- 21) **Choice D is correct.** (7.RP.3) 40% of 250 is $0.40 \times 250 = 100$ liters.
- 22) **Choice D is correct.** (7.RP.3) Discount amount = $60 - 36 = \$24$. Percent = $(24/60) \times 100 = 40\%$.
- 23) **Choice A is correct.** (7.NS.1b) Combine step-by-step: $-5 + 9 = 4$, then $4 + (-4) = 0$. The negatives and positives cancel out.
- 24) **Choice C is correct.** (7.EE.1) Like terms have the same variable and exponent. Both $7m$ and $2m$ contain the variable m with exponent 1.
- 25) **Choice A is correct.** (7.EE.1-7.EE.2) Factor out -7 : $-14p + 35q = -7(2p - 5q)$. Check: $-7(2p - 5q) = -14p + 35q$.
- 26) **The correct answer is (2, -2).** (7.G.1-7.G.5) Reflection over the x -axis uses the rule $(x, y) \rightarrow (x, -y)$. Applying this to $C(2, 2)$: $C' = (2, -2)$.
- 27) **Choice B is correct.** (7.EE.4b) $x < -2$ means all values less than (but not equal to) -2 . Use an open circle and an arrow pointing left.
- 28) **Choice B is correct.** (7.SP.1-7.SP.4) $54^\circ \div 360^\circ \times 100 = 15\%$.
- 29) **Choice C is correct.** (7.NS.1-7.NS.3) $-5 \times 4 = -20$ is correct (negative times positive is negative). Her error was reversing the sign to $+20$ after the multiplication, which is incorrect.



Hi, Persistent Problem Solver!

◇ Some Grade 7 questions ask you to hold several ideas in your mind at once. That can feel hard, and that is exactly why practice matters. ◇

★ **Remember this:** You showed persistence by continuing through the set. That habit is powerful because difficult problems often open after one more good attempt. You practiced across 6 full Grade 7 practice tests, and that repeated effort matters. ★

Persistence Tools

- **Try a Smaller Case:** Use an easier number to see the pattern.
- **Draw It:** Make the situation visible.
- **Restate It:** Say the question in your own words.
- **Check One Step:** Fix the first unclear place.

Grade 7 test-day tip: When stuck, do not restart everything. Find the first step you trust, then rebuild from there.

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

Jay Daie

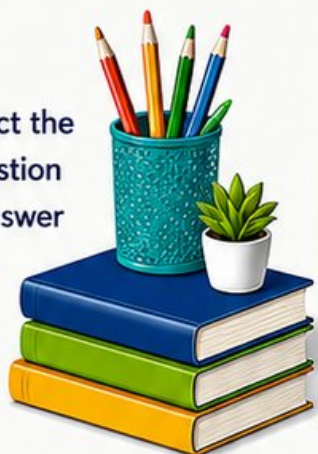
Your Persistence Coach

PRACTICE TODAY. SUCCEED TOMORROW!

This book includes **6** 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:

6 Full-Length Printed Tests

2 Online Practice Tests

 Detailed Answers & 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



Build Confidence

Practice regularly to feel prepared and test-ready.



Strengthen Math Skills

Develop key math concepts and problem solving abilities.



Improve Understanding

Learn with clear explanations and step-by-step solutions.



Test Confidence

Familiarize with test formats and improve accuracy and speed.



Boost Performance

Apply your knowledge and achieve your best score!

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



PRACTICE
REGULARLY



STAY
FOCUSED



SOLVE
CONFIDENTLY



SUCCEED
BRIGHTLY