5 Full-Length TASC Math Practice Tests

The Practice You Need to Ace the TASC Math Test

2019

Reza Nazari & Ava Ross

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Math Test

By

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Description

5 Full-Length TASC Math Practice Tests, which reflects the 2019 and 2020 test guidelines and topics, is designed to help you hone your math skills, overcome your exam anxiety, and boost your confidence -- and do your best to ace the TASC Math Test. The realistic and full-length TASC Math tests show you how the test is structured and what math topics you need to master. The practice test questions are followed by answer explanations to help you find your weak areas, learn from your mistakes, and raise your TASC Math score.

The surest way to succeed on TASC Math Test is with intensive practice in every math topic tested-- and that's what you will get in ***5 Full-Length TASC Math Practice Tests***. This TASC Math new edition has been updated to replicate questions appearing on the most recent TASC Math tests. This is a precious learning tool for TASC Math test takers who need extra practice in math to improve their TASC Math score. After taking the TASC Math practice tests in this book, you will have solid foundation and adequate practice that is necessary to succeed on the TASC Math test. **This book is your ticket to ace the TASC Math!**

5 Full-Length TASC Math Practice Tests contains many exciting and unique features to help you improve your test scores, including:

- Content 100% aligned with the 2019 - 2020 TASC test
- Written by TASC Math tutors and test experts
- Complete coverage of all TASC Math concepts and topics which you will be tested
- Detailed answers and explanations for every TASC Math practice questions to help you learn from your mistakes
- 5 full-length practice tests (featuring new question types) with detailed answers

This TASC Math book and other Effortless Math Education books are used by thousands of students each year to help them review core content areas, brush-up in math, discover their strengths and weaknesses, and achieve their best scores on the TASC test.

About the Author

Reza Nazari is the author of more than 100 Math learning books including:
– Math and Critical Thinking Challenges: For the Middle and High School Student
– GRE Math in 30 Days
– ASVAB Math Workbook 2018 - 2019
– Effortless Math Education Workbooks
– and many more Mathematics books …

Reza is also an experienced Math instructor and a test–prep expert who has been tutoring students since 2008. Reza is the founder of Effortless Math Education, a tutoring company that has helped many students raise their standardized test scores—and attend the colleges of their dreams. Reza provides an individualized custom learning plan and the personalized attention that makes a difference in how students view math.

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TASC Test Review

The Test Assessing Secondary Completion, commonly known as the TASC or high school equivalency degree, is a standardized test. The TASC is a standardized test to verify that examinees have knowledge in core content areas equivalent to that of graduating high school seniors.

There are five subject area tests on TASC:

- Reading;
- Writing;
- Social Studies;
- Science;
- Mathematics.

The TASC Mathematics test is a 105-minute test that covers basic mathematics topics, quantitative problem-solving and algebraic questions. There are two Mathematics sections on the TASC. The first section contains 40 multiple choice questions where calculators are permitted. You have 55 minutes to complete this section. The second section contains 12 Gridded-Response questions. Calculator is NOT allowed in the second part. Test takers have 50 minutes to answer all questions in this section. Examinees will also be given a page of mathematic formulas to use during the test.

In this book, there are five complete TASC Mathematics Tests. Take these tests to see what score you'll be able to receive on a real TASC test.

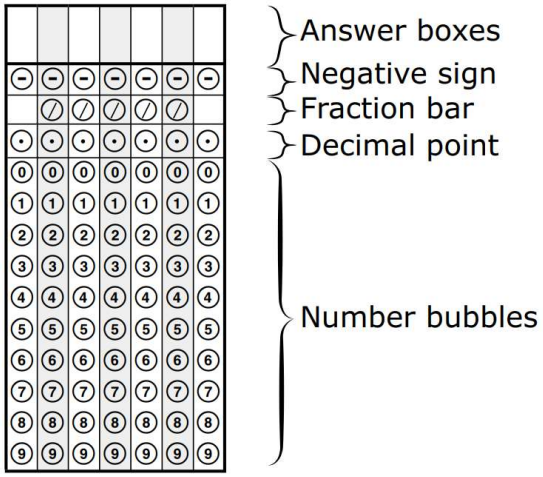
Good luck!

Time to refine your quantitative reasoning skill with a practice test

In this section, there are two complete TASCT Mathematics practice tests. Take these tests to simulate the test day experience. After you've finished, score your tests using the answer keys.

Before You Start

- You'll need a pencil, a calculator, and a timer to take the test.
- It's okay to guess. You won't lose any points if you're wrong. So be sure to answer every question.
- After you've finished the test, review the answer key to see where you went wrong.
- **Calculators are only permitted for the first section of the TASC Test.**
- The TASC Mathematics test contains a formula sheet, which displays formulas relating to geometric measurement and certain algebra concepts. Formulas are provided to test-takers so that they may focus on application, rather than the memorization, of formulas.
- For each multiple-choice question, there are four possible answers. Choose which one is best. For grids in questions, write your answer in the answer boxes at the top of the grid. Then, as shown below fill in a bubble under each box in which you wrote your answer.



Good Luck!

TASC Mathematics Practice Test 1

2019

Two Parts

Total number of questions: 52

Part 1 (Calculator): 40 questions

Part 2 (Calculator): 12 questions

Total time for two parts: 105 Minutes

TASC Practice Tests Answer Sheet

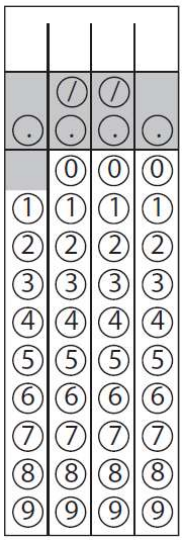
Remove (or photocopy) these answer sheets and use them to complete the practice tests.

TASC Practice Test 1 – Section 1 Answer Sheet

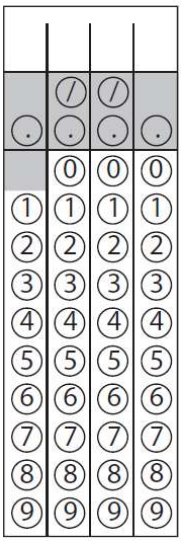
1	Ⓐ Ⓑ Ⓒ Ⓓ	9	Ⓐ Ⓑ Ⓒ Ⓓ	17	Ⓐ Ⓑ Ⓒ Ⓓ	25	Ⓐ Ⓑ Ⓒ Ⓓ	33	Ⓐ Ⓑ Ⓒ Ⓓ
2	Ⓐ Ⓑ Ⓒ Ⓓ	10	Ⓐ Ⓑ Ⓒ Ⓓ	18	Ⓐ Ⓑ Ⓒ Ⓓ	26	Ⓐ Ⓑ Ⓒ Ⓓ	34	Ⓐ Ⓑ Ⓒ Ⓓ
3	Ⓐ Ⓑ Ⓒ Ⓓ	11	Ⓐ Ⓑ Ⓒ Ⓓ	19	Ⓐ Ⓑ Ⓒ Ⓓ	27	Ⓐ Ⓑ Ⓒ Ⓓ	35	Ⓐ Ⓑ Ⓒ Ⓓ
4	Ⓐ Ⓑ Ⓒ Ⓓ	12	Ⓐ Ⓑ Ⓒ Ⓓ	20	Ⓐ Ⓑ Ⓒ Ⓓ	28	Ⓐ Ⓑ Ⓒ Ⓓ	36	Ⓐ Ⓑ Ⓒ Ⓓ
5	Ⓐ Ⓑ Ⓒ Ⓓ	13	Ⓐ Ⓑ Ⓒ Ⓓ	21	Ⓐ Ⓑ Ⓒ Ⓓ	29	Ⓐ Ⓑ Ⓒ Ⓓ	37	Ⓐ Ⓑ Ⓒ Ⓓ
6	Ⓐ Ⓑ Ⓒ Ⓓ	14	Ⓐ Ⓑ Ⓒ Ⓓ	22	Ⓐ Ⓑ Ⓒ Ⓓ	30	Ⓐ Ⓑ Ⓒ Ⓓ	38	Ⓐ Ⓑ Ⓒ Ⓓ
7	Ⓐ Ⓑ Ⓒ Ⓓ	15	Ⓐ Ⓑ Ⓒ Ⓓ	23	Ⓐ Ⓑ Ⓒ Ⓓ	31	Ⓐ Ⓑ Ⓒ Ⓓ	39	Ⓐ Ⓑ Ⓒ Ⓓ
8	Ⓐ Ⓑ Ⓒ Ⓓ	16	Ⓐ Ⓑ Ⓒ Ⓓ	24	Ⓐ Ⓑ Ⓒ Ⓓ	32	Ⓐ Ⓑ Ⓒ Ⓓ	40	Ⓐ Ⓑ Ⓒ Ⓓ

TASC Practice Test 1: Section 2: Grid-ins Questions

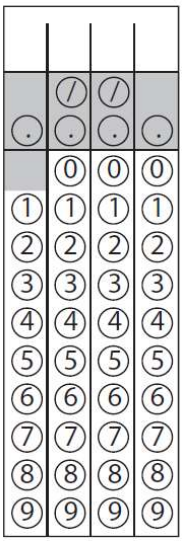
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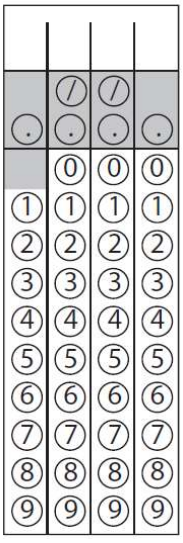
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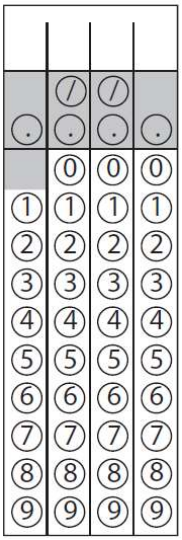
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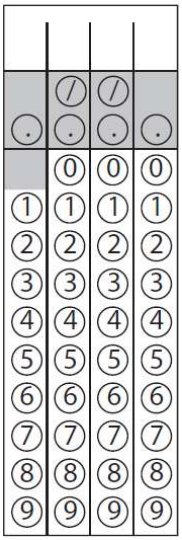
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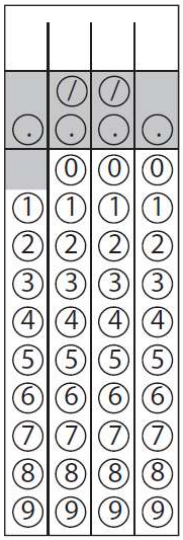
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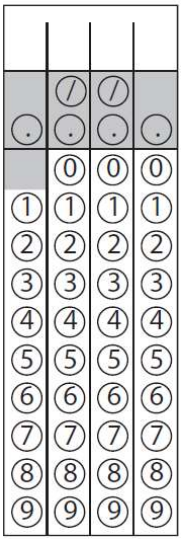
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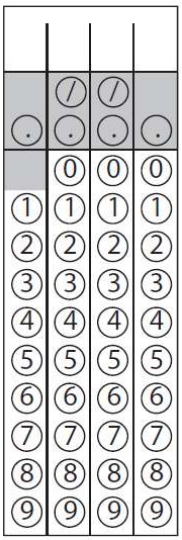
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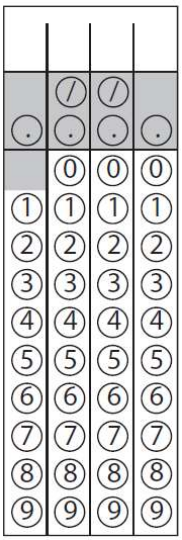
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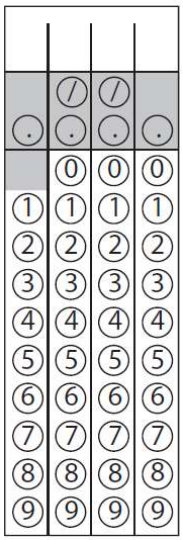
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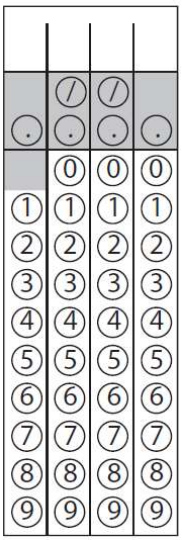
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51



52



TASC Mathematics

Practice Test 1

Part 1 (Calculator)

Total number of questions: 40

Total time for Part 1 (Calculator): 55 Minutes

You may use a calculator on this part.

Mathematics Reference Sheet

Cylinder: $v = \pi r^2 h$

Pyramid: $v = \frac{1}{3}bh$

cone: $v = \frac{1}{3}\pi r^2 h$

Sphere: $\frac{4}{3}\pi r^3$

coordinate Geometry

Midpoint of the segment AB:

$M\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$

Distance from A to B:

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

Slope of a line:

$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{rise}{\text{run}}$$

Special Factoring

$a^2 - b^2 = (a + b)(a - b)$

$a^2 + 2ab + b^2 = (a + b)(a + b)$

$a^2 - 2ab + b^2 = (a - b)(a - b)$

$a^3 + b^3 = (a + b)(a^2 - ab + b^2)$

$a^3 - b^3 = (a - b)(a^2 + ab + b^2)$

Quadratic Formula

for $ax^2 + bx + c = 0$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Interest

Simple Interest:

$$I = prt$$

Interest Formula (compounded n times per year):

$$A = p(1 + \frac{r}{n})^{nt}$$

A = Amount after t years.

p = principal

r = annual interest rate

t = time in years

I = Interest

Trigonometric Identities

Pythagorean Theorem: $a^2 + b^2 = c^2$

$\sin\theta = \frac{opp}{hyp}$

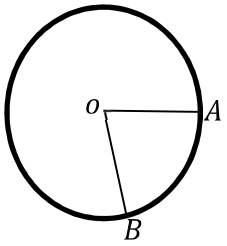
$\cos\theta = \frac{adj}{hyp}$

$\tan\theta = \frac{opp}{adj}$

$sin^2\theta + cos^2\theta = 1$

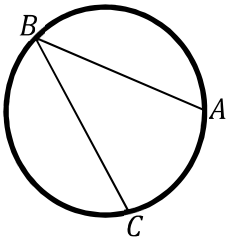
$\text{Density} = \frac{Mass}{Volume}$

Central Angle



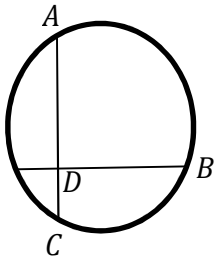
$m\angle AOB = m\widehat{AB}$

Inscribed Angle



$m\angle ABC = \frac{1}{2} m\,\widehat{AC}$

Intersecting Chords Theorem



$A \cdot B = C \cdot D$

Probability

Permutations: ${}_nP_r = \frac{n!}{(n-r)!}$

Combinations: ${}_nC_r = \frac{n!}{(n-r)!r!}$

Multiplication rule (independent events): P(A and B) = P(A)·P(B)

Multiplication rule (general): P(A and B) = P(A)·P(B|A)

Addition rule: P(A or B) = P(A) + P(B) – P(A and B)

Conditional Probability: $P(B|A) = \frac{P(A\ and\ B)}{P(A)}$

Arithmetic Sequence: $a_n = a_1 + (n-1)d$ where a_n is the nth term, a_1 is the first term, and d is the common difference.

Geometric Sequence: $a_n = a_1 r^{(n-1)}$ where a_n is the nth term, a_1 is the first term, and r is the common ratio.

1) When a number is subtracted from 24 and the difference is divided by that number, the result is 3. What is the value of the number?

A. 2

B. 4

C. 6

D. 12

2) An angle is equal to one ninth of its supplement. What is the measure of that angle?

A. 18

B. 24

C. 36

D. 45

3) John traveled $150\ \text{km}$ in 6 hours and Alice traveled $160\ \text{km}$ in 4 hours. What is the ratio of the average speed of John to average speed of Alice?

A. $3:2$

B. $2:3$

C. $5:8$

D. $5:6$

4) A taxi driver earns $\$7$ per 1 –hour work. If he works 10 hours a day and in 1 hour he uses 2-liters petrol with price $\$1$ for 1 –liter. How much money does he earn in one day?

A. $\$90$

B. $\$88$

C. $\$50$

D. $\$30$

5) Find the average of the following numbers: $12, 13, 7, 21, 22$

A. 17

B. 16.5

C. 15

D. 11

6) The price of a sofa is decreased by 15% to $\$476$. What was its original price?

A. $\$480$

B. $\$520$

C. $\$560$

D. $\$600$

7) Right triangle ABC has two legs of lengths 9 cm (AB) and 12 cm (AC). What is the length of the third side (BC)?

A. 6 cm

B. 8 cm

C. 14 cm

D. 15 cm

8) If 40% of a class are girls, and 25% of girls play tennis, what percent of the class play tennis?

A. 10%

B. 15%

C. 20%

D. 40%

9) The area of a circle is less than $36\ \pi$. Which of the following can be the circumference of the circle?

A. $10\ \pi$

B. $12\ \pi$

C. $24\ \pi$

D. $36\ \pi$

10) Which of the following values for x and y satisfy the following system of equations?

$$\begin{cases} x + 4y = 10 \\ 5x + 10y = 10 \end{cases}$$

A. $x = 3, y = 2$
B. $x = 2, y - 3$
C. $x = -6, y = 4$
D. $x = 4, y = -2$

11) If 60% of A is 20% of B, then B is what percent of A?

A. 3%

B. 30%

C. 200%

D. 300%

12) The price of a car was $\$20{,}000$ in 2014, $\$15{,}000$ in 2015 and $\$11{,}200$ in 2016. What is the rate of depreciation of the price of car per year?

A.15%

B. 25%

C.30%

D. 35%

13) The width of a box is one third of its length. The height of the box is one third of its width. If the length of the box is 45 cm, what is the volume of the box?

A.$81\ \text{cm}^3$

B. $162\ \text{cm}^3$

C.$243\ \text{cm}^3$

D. $3{,}375\ \text{cm}^3$

14) How many possible outfit combinations come from six shirts, three slacks, and five ties?
A. 15
B. 18
C. 30
D. 90

15) A bank is offering 4.5% simple interest on a savings account. If you deposit $\$8{,}000$, how much interest will you earn in five years?

A. $\$360$

B. $\$720$

C. $\$1{,}800$

D. $\$3{,}600$

16) What is the value of 6^4 ?
A. 216
B. 1,296
C. 7,776
D. 46,656

17) 15 is What percent of 20?

A. 20%

B. 25%

C. 75%

D. 125%