5 Full-Length GED Math Practice Tests

The Practice You Need to Ace the GED Math Test

2019

Reza Nazari & Ava Ross

www.EffortlessMath.com

… So Much More Online!

- ✓ FREE Math lessons
- ✓ More Math learning books!
- ✓ Mathematics Worksheets
- ✓ Online Math Tutors

Need a PDF version of this book?

Please visit www.EffortlessMath.com

5 Full-Length GED Math Practice Tests

The Practice You Need to Ace the GED

Math Test

By

Reza Nazari & Ava Ross

Copyright © 2019

Reza Nazari & Ava Ross

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Ac, without permission of the author.

All inquiries should be addressed to:

info@effortlessMath.com

www.EffortlessMath.com

ISBN-13: 978-1-970036-99-2

ISBN-10: 1-970036-99-0

Published by: Effortless Math Education

www.EffortlessMath.com

Description

5 Full-Length GED 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 GED Math Test. The realistic and full-length GED Math tests, which reflect the format and question types on the GED, 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 GED Math score.

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

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

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

This GED 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 GED 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
– GED 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.

You can contact Reza via email at:
reza@EffortlessMath.com

Find Reza's professional profile at:
goo.gl/zoC9rJ

Contents

Description 4
GED Test Review 7
GED Mathematical Reasoning Practice Test 1 9
GED Mathematical Reasoning Practice Test 2 22
GED Mathematical Reasoning Practice Test 3 34
GED Mathematical Reasoning Practice Test 4 47
GED Mathematical Reasoning Practice Test 5 60
GED Mathematical Reasoning Practice Tests Answer Keys 73
How to score your test 76
GED Mathematical Reasoning Practice Tests Answers and Explanations 79

GED Test Review

The General Educational Development Test, commonly known as the GED or high school equivalency degree, is a standardized test and is the only high school equivalency test recognized in all 50 USA states.

Currently, GED is a computer-based test. Official computer-based tests are given at test centers all over the country. There are four subject area tests on GED:

- Reasoning Through Language Arts,
- Mathematical Reasoning,
- Social Studies,
- Science

The GED Mathematical Reasoning test is a 115-minute, single-section test that covers basic mathematics topics, quantitative problem-solving and algebraic questions. There are two parts on Mathematical Reasoning section. The first part contains 5 questions where calculators are not permitted. The second part contains 41 test questions. Calculator is allowed in the second part.

In this book, there are 5 complete GED Mathematical Reasoning Tests. Take these tests to see what score you'll be able to receive on a real GED test.

Good luck!

Time to refine your skill with a practice examination

Take a practice GED Math Test to simulate the test day experience. After you've finished, score your test using the answer key.

Before You Start

- You'll need a pencil and a calculator to take the test.
- There are two types of questions:

  Multiple choice questions: for each of these questions, there are four or more possible answers. Choose which one is best.

  Grid-ins questions: for these questions, write your answer in the box provided.
- It's okay to guess. You won't lose any points if you're wrong.
- The GED® Mathematical Reasoning 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.
- After you've finished the test, review the answer key to see where you went wrong and what areas you need to improve.

Good luck!

GED Mathematical Reasoning Practice Test 1

2019

Two Parts

Total number of questions: 46

Part 1 (Non-Calculator): 5 questions

Part 2 (Calculator): 41 questions

Total time for two parts: 115 Minutes

GED Test Mathematics Formula Sheet

Area of a:

Parallelogram $A = bh$

Trapezoid $A = \frac{1}{2}h(b_1 + b_2)$

Surface Area and Volume of a:

Rectangular/Right Prism	$SA = ph + 2B$	$V = Bh$
Cylinder	$SA = 2\pi rh + 2\pi r^2$	$V = \pi r^2 h$
Pyramid	$SA = \frac{1}{2}ps + B$	$V = \frac{1}{3}Bh$
Cone	$SA = \pi r + \pi r^2$	$V = \frac{1}{3}\pi r^2 h$
Sphere	$SA = 4\pi r^2$	$V = \frac{4}{3}\pi r^3$

(p = perimeter of base B; $\pi = 3.14$)

Algebra

Slope of a line $m = \frac{y_2 - y_1}{x_2 - x_1}$

Slope-intercept form of the equation of a line $y = mx + b$

Point-slope form of the Equation of a line $y - y_1 = m(x - x_1)$

Standard form of a Quadratic equation $y = ax^2 + bx + c$

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

Pythagorean theorem $a^2 + b^2 = c^2$

Simple interest $I = prt$

(I = interest, p = principal, r = rate, t = time)

GED Mathematical Reasoning

Practice Test 1

Part 1 (Non-Calculator)

5 questions

Total time for two parts (Non-Calculator, and Calculator parts): 115 Minutes

You may NOT use a calculator on this part.

1) What is the value of this expression? $[3 \times (-14) - 48] - (-14) + [3 \times 8] \div 2$

Write your answer in the box below.

2) A tree 32 feet tall casts a shadow 12 feet long. Jack is 6 feet tall. How long is Jack's shadow?

☐A. $2.25\ ft$ ☐B. $4\ ft$

☐C. $4.25\ ft$ ☐D. $8\ ft$

3) What is the product of all possible values of x in the following equation?

$$|2x - 6| = 12$$

☐A. -27 ☐B. -3

☐C. 9 ☐D. 27

4) What is the slope of a line that is perpendicular to the line $3x - y = 6$?

☐A. -3 ☐B. $-\frac{1}{3}$

☐C. 2 ☐D. 6

5) What is the value of the expression $3(x - 2y) + (2 - x)^2$ when $x = 5$ and $y = -3$?

☐A. -22 ☐B. 24

☐C. 42 ☐D. 88

GED Mathematical Reasoning

Practice Test 1

Part 2 (Calculator)

41 questions

Total time for two parts (Non-Calculator, and Calculator parts): 115 Minutes

You may use a calculator on this part.

6) If $x - 4(x + 2) = -15.5$, what is the value of x?

Write your answer in the box below.

7) Which of the following answers represents the compound inequality $-4 \leq 4x - 8 < 16$?

☐A. $-2 \leq x \leq 8$

☐B. $-2 < x \leq 8$

☐C. $1 < x \leq 6$

☐D. $1 \leq x < 6$

8) What is the volume of a box with the following dimensions?

Hight = $4\ cm$ Width = $5\ cm$ Length = $6\ cm$

☐A. $15\ cm^3$

☐B. $60\ cm^3$

☐C. $90\ cm^3$

☐D. $120\ cm^3$

9) Simplify the expression.

$$(6x^3 - 8x^2 + 2x^4) - (4x^2 - 2x^4 + 2x^3)$$

☐A. $4x^4 + 4x^3 - 12x^2$

☐B. $4x^3 - 12x^2$

☐C. $4x^4 + 4x^3 + 12x^2$

☐D. $8x^3 - 12x^2$

10) In two successive years, the population of a town is increased by 15% and 20%. What percent of the population is increased after two years?

☐A. 32%

☐B. 35%

☐C. 38%

☐D. 68%

11) Last week $24{,}000$ fans attended a football match. This week three times as many bought tickets, but one sixth of them cancelled their tickets. How many are attending this week?

☐A. $48{,}000$ ☐B. $54{,}000$

☐C. $60{,}000$ ☐D. $72{,}000$

12) What is the perimeter of a square in centimeters that has an area of $595.36\ cm^2$?

Write your answer in the box below. (don't write the measurement)

13) Which of the following shows the numbers from least to greatest?

$$\frac{2}{3}, 0.68, 67\%, \frac{4}{5}$$

☐ A. $67\%, 0.68, \frac{2}{3}, \frac{4}{5}$ ☐B. $67\%, 0.68, \frac{4}{5}, \frac{2}{3}$

☐C. $0.68, 67\%, \frac{2}{3}, \frac{4}{5}$ ☐D. $\frac{2}{3}, 67\%, 0.68, \frac{4}{5}$

14) The mean of 50 test scores was calculated as 88. But, it turned out that one of the scores was misread as 94 but it was 69. What is the correct mean of the test scores?

☐A. 85 ☐B. 87

☐C. 87.5 ☐D. 88.5

15) Two dice are thrown simultaneously, what is the probability of getting a sum of 5 or 8?

☐A. $\frac{1}{3}$ ☐B. $\frac{1}{4}$

☐C. $\frac{1}{16}$ ☐D. $\frac{11}{36}$

16) A swimming pool holds $2{,}000$ cubic feet of water. The swimming pool is 25 feet long and 10 feet wide. How deep is the swimming pool?

Write your answer in the box below. (Don't write the measurement)

17) Mr. Carlos family are choosing a menu for their reception. They have 3 choices of appetizers, 5 choices of entrees, 4 choices of cake. How many different menu combinations are possible for them to choose?

☐A. 12 ☐B. 32

☐C. 60 ☐D. 120

18) In a stadium the ratio of home fans to visiting fans in a crowd is $5:7$. Which of the following could be the total number of fans in the stadium? (Select one or more answer choices)

☐A. $12{,}324$ ☐C. $42{,}326$ ☐E. $66{,}812$

☐B. $16{,}788$ ☐D. $44{,}566$

19) What is the area of a square whose diagonal is 8?

☐A. 16 ☐B. 32

☐C. 36 ☐D. 64

20) Anita's trick–or–treat bag contains 12 pieces of chocolate, 18 suckers, 18 pieces of gum, 24 pieces of licorice. If she randomly pulls a piece of candy from her bag, what is the probability of her pulling out a piece of sucker?

☐A. $\frac{1}{3}$ ☐B. $\frac{1}{4}$

☐C. $\frac{1}{6}$ ☐D. $\frac{1}{12}$

21) Which of the following points lies on the line $x + 2y = 4$? (Select one or more answer choices)

☐A. $(-2, 3)$ ☐B. $(1, 2)$

☐C. $(-1, 3)$ ☐D. $(-3, 4)$

☐E. $(0, 2)$

22) The perimeter of a rectangular yard is 60 meters. What is its length if its width is twice its length?

☐A. 10 meters ☐B. 18 meters

☐C. 20 meters ☐D. 24 meters

23) The average of 6 numbers is 12. The average of 4 of those numbers is 10. What is the average of the other two numbers.

☐A. 10 ☐B. 12

☐C. 14 ☐D. 16

24) What is the value of x in the following system of equations?

$$2x + 5y = 11$$
$$4x - 2y = -14$$

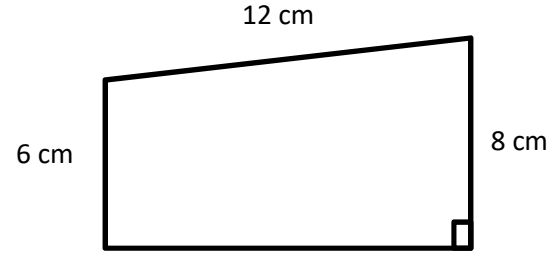
☐A. -1 ☐B. 1

☐C. -2 ☐D. 4

25) The perimeter of the trapezoid below is $36\ cm$. What is its area?

☐A. $576\ cm^2$ ☐B. $70\ cm^2$

☐C. $48\ cm^2$ ☐D. $24\ cm^2$



26) A card is drawn at random from a standard 52–card deck, what is the probability that the card is of Hearts? (The deck includes 13 of each suit clubs, diamonds, hearts, and spades)

☐A. $\frac{1}{3}$ ☐B. $\frac{1}{4}$

☐C. $\frac{1}{6}$ ☐D. $\frac{1}{52}$

27) The average of five numbers is 25. If a sixth number that is greater than 42 is added, then, which of the following could be the new average? (Select one or more answer choices)

☐A. 25 ☐C. 27 ☐E. 42

☐B. 26 ☐D. 28

28) The diagonal of a rectangle is 10 inches long and the height of the rectangle is 8 inches. What is the perimeter of the rectangle in inches?

Write your answer in the box below.

29) The ratio of boys and girls in a class is $4:7$. If there are 44 students in the class, how many more boys should be enrolled to make the ratio $1:1$?

☐A. 8 ☐B. 10

☐C. 12 ☐D. 14

30) Mr. Jones saves $\$2{,}500$ out of his monthly family income of $\$55{,}000$. What fractional part of his income does he save?

☐A. $\frac{1}{22}$ ☐B. $\frac{1}{11}$

☐C. $\frac{3}{25}$ ☐D. $\frac{2}{15}$

31) Jason needs an 75% average in his writing class to pass. On his first 4 exams, he earned scores of $68\%, 72\%, 85\%$, and 90%. What is the minimum score Jason can earn on his fifth and final test to pass?

Write your answer in the box below.

32) What is the value of x in the following equation? $\frac{2}{3}x + \frac{1}{6} = \frac{1}{3}$

☐A. 6 ☐B. $\frac{1}{2}$

☐C. $\frac{1}{3}$ ☐D. $\frac{1}{4}$

33) A bank is offering 3.5% simple interest on a savings account. If you deposit $\$12{,}000$, how much interest will you earn in two years?

☐A. $\$420$ ☐B. $\$840$

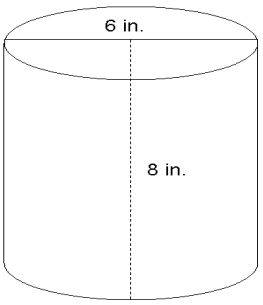
☐C. $\$4200$ ☐D. $\$8{,}400$

34) Simplify $6x^2y^3(2x^2y)^3 =$

☐A. $12x^4y^6$ ☐B. $12x^8y^6$

☐C. $48x^4y^6$ ☐D. $48x^8y^6$

35) What is the surface area of the cylinder below?



☐A. $48\ \pi\ in^2$ ☐B. $57\ \pi\ in^2$

☐C. $66\ \pi\ in^2$ ☐D. $288\ \pi\ in^2$

36) The square of a number is $\frac{25}{64}$. What is the cube of that number?

☐A. $\frac{5}{8}$ ☐B. $\frac{25}{254}$

☐C. $\frac{125}{512}$ ☐D. $\frac{125}{64}$