5 Full-Length ALEKS Math Practice Tests

The Practice You Need to Ace the ALEKS Math Test

2019

Reza Nazari & Ava Ross

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By

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All inquiries should be addressed to:

info@effortlessMath.com

www.EffortlessMath.com

ISBN-13: 978-1-64612-109-0

ISBN-10: 1-64612-109-0

Published by: Effortless Math Education

www.EffortlessMath.com

Description

5 Full-Length ALEKS 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 ALEKS Math Test. The realistic and full-length ALEKS 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 ALEKS Math score.

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

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

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

This ALEKS 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 ALEKS 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
– ALEKS 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

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Time to Test

Time to refine your skill with a practice examination

Take a REAL ALEKS Mathematics test to simulate the test day experience. After you've finished, score your test using the answers and explanations section.

Before You Start

- You'll need a pencil and scratch papers to take the test.
- For these practice tests, don't time yourself. Spend time as much as you need.
- After you've finished the test, review the answer key to see where you went wrong.

Good Luck!

ALEKS Mathematics Practice Test 1

2019 - 2020

Total number of questions: 30

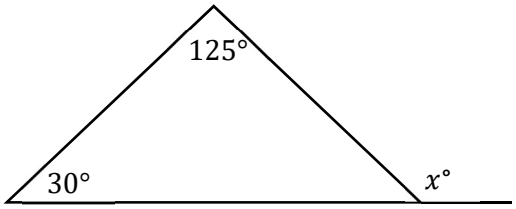
Total time (Calculator): No time limit

Calculators are permitted for ALEKS Math Test.

1) How many tiles of $8\ cm^2$ is needed to cover a floor of dimension $7\ cm$ by $24\ cm$?

2) What is the area of a square whose diagonal is $6\ cm$?

3) What is the value of x in the following figure?



4) What is the value of y in the following system of equation?

$$3x - 4y = -20$$
$$-x + 2y = 20$$

5) How long does a 420–miles trip take moving at 65 miles per hour (mph)?

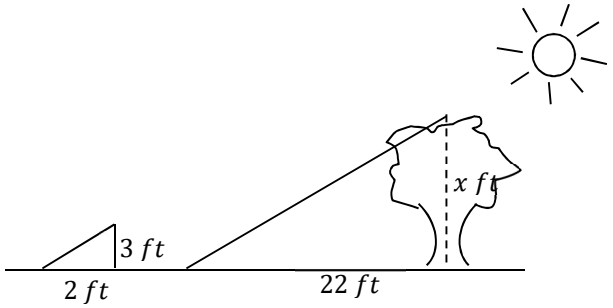
6) When 50% of 60 is added to 12% of 600, the resulting number is:

7) What is the solution of the following inequality?

$$|x - 10| \leq 4$$

8) A bag contains 18 balls: two green, five black, eight blue, a brown, a red and one white. If 17 balls are removed from the bag at random, what is the probability that a brown ball has been removed?

9) If a tree casts a 22–foot shadow at the same time that a 3 feet yardstick casts a 2–foot shadow, what is the height of the tree?



10) What is the value of $cos\ 30°$?

11) Simplify.

$$2x^2 + 4y^5 - x^2 + 2z^3 - 2y^2 + 2x^3 - 2y^5 + 6z^3$$

12) In five successive hours, a car traveled $40\ km, 45\ km, 50\ km, 35\ km$ and $55\ km$. In the next five hours, it traveled with an average speed of $65\ km\ per\ hour$. Find the total distance the car traveled in 10 hours.

13) From last year, the price of gasoline has increased from $\$1.40$ per gallon to $\$1.75$ per gallon. The new price is what percent of the original price?

14) 6 liters of water are poured into an aquarium that's $25cm$ long, $5cm$ wide, and $60cm$ high. How many cm will the water level in the aquarium rise due to this added water? ($1\ liter\ of\ water = 1{,}000\ cm^3$)

15) If a box contains red and blue balls in ratio of $2:3$, how many red balls are there if 75 blue balls are in the box?

16) A chemical solution contains 6% alcohol. If there is $24\ ml$ of alcohol, what is the volume of the solution?

17) If $\frac{5x}{16} = \frac{x-1}{4}$, $x =$

18) Simplify $(-4 + 9i)(3 + 5i)$,

19) If $tan\ \theta = \frac{5}{12}$ and $sin\ \theta > 0$, then $cos\ \theta =$?

20) If 60% of x equal to 30% of 20, then what is the value of $(x + 7)^2$?

21) A boat sails 80 miles south and then 60 miles east. How far is the boat from its start point?

22) If $x\begin{bmatrix}2 & 0\\ 0 & 4\end{bmatrix} = \begin{bmatrix}x+3y-5 & 0\\ 0 & 2y+10\end{bmatrix}$, what is the product of x and y?

23) A number is chosen at random from 1 to 20. Find the probability of not selecting a composite number.

24) Removing which of the following numbers will change the average of the numbers to 8?

$1, 4, 5, 8, 11, 12$

25) If $y = 4ab + 3b^3$, what is y when $a = 2$ and $b = 4$?

26) If $f(x) = 6 + x$ and $g(x) = -x^2 - 1 - 2x$, then find $(g - f)(x)$.

27) If cotangent of an angel β is 2, then the tangent of angle β is …

28) When point $A\,(11, 4)$ is reflected over the y −axis to get the point B, what are the coordinates of point B?

29) If the area of trapezoid is 100, what is the perimeter of the trapezoid?



30) If $f(x) = 2x^3 + 5x^2 + 2x$ and $g(x) = -3$, what is the value of $f(g(x))$?

This is the end of Practice Test 1.