AFOQT Math Prep 2019

A Comprehensive Review and Ultimate Guide to the AFOQT Math Test

10 Full-Length AFOQT Math Practice Exams

2,500 + Math problems with answers

A comprehensive review of everything on AFOQT Math

Reza Nazari & Ava Ross

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A Comprehensive Review and Ultimate Guide to the AFOQT Math Test

By

Reza Nazari & Ava Ross

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Description

AFOQT Math Prep 2019 provides students with the confidence and math skills they need to succeed on the AFOQT Math, building a solid foundation of basic Math topics with abundant exercises for each topic. It is designed to address the needs of AFOQT test takers who must have a working knowledge of basic Math.

This comprehensive book with over 2,500 sample questions and 10 complete AFOQT Arithmetic Reasoning and Mathematics knowledge tests is all you need to fully prepare for the AFOQT Math. It will help you learn everything you need to ace the math section of the AFOQT.

Effortless Math unique study program provides you with an in-depth focus on the math portion of the test, helping you master the math skills that students find the most troublesome.

This book contains most common sample questions that are most likely to appear in the mathematics section of the AFOQT.

Inside the pages of this comprehensive AFOQT Math book, students can learn basic math operations in a structured manner with a complete study program to help them understand essential math skills. It also has many exciting features, including:

- Dynamic design and easy-to-follow activities
- A fun, interactive and concrete learning process
- Targeted, skill-building practices
- Fun exercises that build confidence
- Math topics are grouped by category, so you can focus on the topics you struggle on
- All solutions for the exercises are included, so you will always find the answers
- 10 Complete AFOQT Math Practice Tests that reflect the format and question types on AFOQT

AFOQT Math Prep 2019 is an incredibly useful tool for those who want to review all topics being covered on the AFOQT test. It efficiently and effectively reinforces learning outcomes through engaging questions and repeated practice, helping you to quickly master basic Math skills.

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.

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Chapter 1: Whole Numbers

Topics that you'll learn in this chapter:

- ✓ Place Value
- ✓ Rounding
- ✓ Whole Number Addition and Subtraction
- ✓ Whole Number Multiplication and Division
- ✓ Rounding and Estimates
- ✓ Comparing Numbers

"If people do not believe that mathematics is simple, it is only because they do not realize how complicated life is." — John von Neumann

Place Value

Helpful Hints

The value of the place, or position, of a digit in a number.

For the number 3,684.26

Decimal Place Value Chart

Millions	Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones	Decimal point	Tenths	Hundredths	Thousandths	Ten-thousandths	Hundred thousandths	Millionths
			3	6	8	4	.	2	6				

Example:

In 456, the 5 is in "tens" position.

Write each number in expanded form.

1) Thirty–five 30 + 5

2) Sixty–seven ___ + ___

3) Forty–two ___ + ___

4) Eighty–nine ___ + ___

5) Ninety–one ___ + ___

Circle the correct one.

6) The 2 in 72 is in the ones place tens place hundreds place

7) The 6 in 65 is in the ones place tens place hundreds place

8) The 2 in 342 is in the ones place tens place hundreds place

9) The 5 in 450 is in the ones place tens place hundreds place

10) The 3 in 321 is in the ones place tens place hundreds place

Rounding

Helpful Hints

– Rounding is putting a number up or down to the nearest whole number or the nearest hundred, etc.

Example:

64 rounded to the nearest ten is 60, because 64 is closer to 60 than to 70.

Round each number to the underlined place value.

1) 9̲72
2) 2,9̲95
3) 3̲64
4) 8̲1
5) 5̲5
6) 3̲34
7) 1,2̲03
8) 9.5̲7
9) 7.4̲84
10) 9.1̲4
11) 3̲9
12) 9̲,123
13) 3,45̲2
14) 5̲69
15) 1,2̲30
16) 9̲8
17) 9̲3
18) 3̲7
19) 4̲93
20) 2,9̲23
21) 9̲,845
22) 55̲5
23) 9̲39
24) 6̲9

Whole Number Addition and Subtraction

Helpful Hints		
	1– Line up the numbers.	**Example:**
	2– Start with the unit place. (ones place)	231 + 120 = 351
	3– Regroup if necessary.	292 – 90 = 202
	4– Add or subtract the tens place.	
	5– Continue with other digits.	

Solve.

1) A school had 891 students last year. If all last year students and 338 new students have registered for this year, how many students will there be in total?

2) Alice has just started her first job after graduating from college. Her yearly income is $33,000 per year. Alice's father income is $56,000 per year and her mother's income is $49,000. What is yearly income of Alice and her parent altogether?

3) Tom had $895 dollars in his saving account. He gave $235 dollars to his sister, Lisa. How much money does he have left?

4) Emily has 830 marbles, Daniel has 970 marbles, and Ethan has 230 marbles less than Daniel. How many marbles do they have in all?

Find the missing number.

5) 890 – ..... = 300

6) 1000 – ..... = 200

7) ..... – 4000 = 92000

8) 60000 – 51000 = ...

9) 3400 – ..... = 3200

10) 33000 – 5000 = ...

Whole Number Multiplication and Division

Helpful Hints

Multiplication:

– Learn the times tables first!

– For multiplication, line up the numbers you are multiplying.

– Start with the ones place.

– Continue with other digits

– A typical division problem:

Dividend ÷ Divisor = Quotient

Division:

– In division, we want to find how many times a number (divisor) is contained in another number (dividend).

– The result in a division problem is the quotient.

Example:

200 × 90 = 18,000

18,000 ÷ 90 = 200

Multiply and divided.

1) 340 ÷ 8 =
2) 1800 ÷ 20 =
3) 50000 ÷ 10 =
4) 966 ÷ 30 =
5) 201 × 20 =
6) 400 × 50 =
7) 400 × 90 =
8) 888 × 90 =
9) 80 × 80 =
10) 122 × 12 =
11) 609 × 8 =
12) 220 × 12 =

13) A group of 235 students has collected $8,565 for charity during last month. They decided to split the money evenly among 5 charities. How much will each charity receive?

14) Maria and her two brothers have 9 boxes of crayons. Each box contains 56 crayons. How many crayons do Maria and her two brothers have?

Rounding and Estimates

Helpful Hints		Example:
	– Rounding and estimating are math strategies used for approximating a number.	
	– To estimate means to make a rough guess or calculation.	73 + 69 ≈ 140
	– To round means to simplify a known number by scaling it slightly up or down.	

Estimate the sum by rounding each added to the nearest ten.

1) 55 + 9
2) 25 + 12
3) 83 + 7
4) 32 + 37
5) 13 + 74
6) 34 + 11
7) 39 + 77
8) 25 + 4
9) 61 + 73
10) 64 + 59
11) 14 + 68
12) 82 + 12
13) 43 + 66
14) 45 + 65
15) 553 + 232
16) 418 + 846
17) 582 + 277
18) 2771 + 1651
19) 7436 + 3575
20) 1542 + 8738
21) 3843 + 6579
22) 4722 + 8186
23) 2419 + 7224
24) 6768 + 3169

Comparing Numbers

Helpful Hints

Comparing:	Example:
Equal to =	
Less than <	56 > 35
Greater than >	
Greater than or equal ≥	
Less than or equal ≤	

Use > = <.

1) 35	67	8) 90	56
2) 89	56	9) 94	98
3) 56	35	10) 48	23
4) 27	56	11) 24	54
5) 34	34	12) 89	89
6) 28	45	13) 50	30
7) 89	67	14) 20	20

Use less than, equal to or greater than.

15) 23 _____ 34	22) 56 _____ 43
16) 89 _____ 98	23) 34 _____ 34
17) 45 _____ 25	24) 92 _____ 98
18) 34 _____ 32	25) 38 _____ 46
19) 91 _____ 91	26) 67 _____ 58
20) 57 _____ 55	27) 88 _____ 69
21) 85 _____ 78	28) 23 _____ 34

Answers of Worksheets – Chapter 1

Place Value

1) 30 + 5
2) 60 + 7
3) 40 + 2
4) 80 + 9
5) 90 + 1
6) ones place
7) tens place
8) ones place
9) tens place
10) hundreds place

Rounding

1) 1000
2) 3000
3) 360
4) 80
5) 60
6) 330
7) 1200
8) 9.6
9) 7.5
10) 9.1
11) 40
12) 9000
13) 3,450
14) 600
15) 1,200
16) 100
17) 90
18) 40
19) 490
20) 2,900
21) 10,000
22) 560
23) 900
24) 70

Whole Number Addition and Subtraction

1) 1229
2) 138000
3) 660
4) 2540
5) 590
6) 800
7) 96000
8) 9000
9) 200
10) 28000

Whole Number Multiplication and Division

1) 42.5
2) 90
3) 5000
4) 32.2
5) 4020
6) 20000
7) 36000
8) 79920
9) 6400
10) 1464
11) 4872
12) 2640
13) 1713
14) 504