Common Core Mathematics Workbook For Grade 8

Step-By-Step Guide to Preparing for the Common Core Math Test 2019

The Only Book Your Student Will Ever Need to ACE the Common Core Math Test!

2 Complete Common Core Math Practice Tests

Reza Nazari
&
Ava Ross

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By

Reza Nazari

& Ava Ross

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Description

The goal of this book is simple. It will help your student incorporates the best method and the right strategies to prepare for the Common Core Mathematics test FAST and EFFECTIVELY.

Common Core Mathematics Workbook is full of specific and detailed material that will be key to succeeding on the Common Core Math. It's filled with the critical math concepts a student will need in order to ace the test. Math concepts in this book break down the topics, so the material can be quickly grasped. Examples are worked step–by–step, so you learn exactly what to do.

Common Core Mathematics Workbook helps your student to focus on all Math topics that students will need to ace the Common Core Math test. This book with 2 complete Common Core tests is all your student will ever need to fully prepare for the Common Core Math.

This workbook includes practice test questions. It contains easy–to–read essential summaries that highlight the key areas of the Common Core Math test. Effortless Math test study guide reviews the most important components of the Common Core Math test. Anyone planning to take the Common Core Math test should take advantage of the review material and practice test questions contained in this study guide.

Inside the pages of this workbook, 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
- Math topics are grouped by category, so students can focus on the topics they struggle on
- All solutions for the exercises are included, so you will always find the answers

- 2 Complete Common Core Math Practice Tests that reflect the format and question types on Common Core

Common Core Mathematics Workbook is a breakthrough in Math learning — offering a winning formula and the most powerful methods for learning basic Math topics confidently. Each section offers step–by–step instruction and helpful hints, with a few topics being tackled each chapter. Two complete REAL Common Core Math tests are provided at the back of the book to refine your student's Math skills.

Common Core Math Workbook **is the only book your student will ever need to master Basic Math topics!** It can be used as a self–study course – you do not need to work with a Math tutor. (It can also be used with a Math tutor).

Ideal for self–study as well as for classroom usage.



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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Contents

Chapter 1: Fractions and Decimals 11
Simplifying Fractions 12
Adding and Subtracting Fractions 13
Multiplying and Dividing Fractions 14
Adding Mixed Numbers 15
Subtract Mixed Numbers 16
Multiplying Mixed Numbers 17
Dividing Mixed Numbers 18
Comparing Decimals 19
Rounding Decimals 20
Adding and Subtracting Decimals 21
Multiplying and Dividing Decimals 22
Converting Between Fractions, Decimals and Mixed Numbers 23
Factoring Numbers 24
Greatest Common Factor 25
Least Common Multiple 26
Test Preparation 27
Answers of Worksheets – Chapter 1 29
Chapter 2: Real Numbers and Integers 36
Adding and Subtracting Integers 37
Multiplying and Dividing Integers 38
Ordering Integers and Numbers 39
Arrange, Order, and Comparing Integers 40
Order of Operations 41
Mixed Integer Computations 42
Integers and Absolute Value 43
Test Preparation 44
Answers of Worksheets – Chapter 2 46
Chapter 3: Proportions and Ratios 50
Writing Ratios 51
Simplifying Ratios 52

Create a Proportion 53
Similar Figures 54
Simple Interest 55
Ratio and Rates Word Problems 56
Test Preparation 57
Answers of Worksheets – Chapter 3 60
Chapter 4: Percent 64
Percentage Calculations 65
Converting Between Percent, Fractions, and Decimals 66
Percent Problems 67
Find What Percentage a Number Is of Another 68
Find a Percentage of a Given Number 69
Percent of Increase and Decrease 70
Markup, Discount, and Tax 71
Test Preparation 72
Answers of Worksheets – Chapter 4 74
Chapter 5: Algebraic Expressions 79
Expressions and Variables 80
Simplifying Variable Expressions 81
Simplifying Polynomial Expressions 82
Translate Phrases into an Algebraic Statement 83
The Distributive Property 84
Evaluating One Variable 85
Evaluating Two Variables 86
Combining like Terms 87
Test Preparation 88
Answers of Worksheets – Chapter 5 90
Chapter 6: Equations 94
One–Step Equations 95
One–Step Equation Word Problems 96
Two–Step Equations 97
Two–Step Equation Word Problems 98

Multi–Step Equations 99
Test Preparation 100
Answers of Worksheets – Chapter 6 102
Chapter 7: Systems of Equations 106
Solving Systems of Equations by Substitution 107
Solving Systems of Equations by Elimination 108
Systems of Equations Word Problems 109
Test Preparation 110
Answers of Worksheets – Chapter 7 111
Chapter 8: Inequalities 113
Graphing Single–Variable Inequalities 114
One–Step Inequalities 115
Two–Step Inequalities 116
Multi–Step Inequalities 117
Test Preparation 118
Answers of Worksheets – Chapter 8 121
Chapter 9: Linear Functions 125
Finding Slope 126
Graphing Lines Using Slope–Intercept Form 127
Graphing Lines Using Standard Form 128
Writing Linear Equations 129
Graphing Linear Inequalities 130
Finding Midpoint 131
Finding Distance of Two Points 132
Slope and Rate of Change 133
Find the Slope, x–intercept and y–intercept 134
Write an Equation from a Graph 135
Slope–intercept Form 136
Point–slope Form 137
Equations of Horizontal and Vertical Lines 138
Equation of Parallel or Perpendicular Lines 139
Test Preparation 140
Answers of Worksheets – Chapter 9 142

Chapter 10: Monomials and Polynomials 150
Classifying Polynomials 151
Writing Polynomials in Standard Form 152
Simplifying Polynomials 153
Add and Subtract monomials 154
Multiplying Monomials 155
Multiplying and Dividing Monomials 156
GCF of Monomials 157
Powers of monomials 158
Multiplying a Polynomial and a Monomial 159
Multiplying Binomials 160
Factoring Trinomials 161
Test Preparation 162
Answers of Worksheets – Chapter 10 164
Chapter 11: Exponents and Radicals 170
Multiplication Property of Exponents 171
Division Property of Exponents 172
Powers of Products and Quotients 173
Zero and Negative Exponents 174
Negative Exponents and Negative Bases 175
Writing Scientific Notation 176
Square Roots 177
Test Preparation 178
Answers of Worksheets – Chapter 11 180
Chapter 12: Plane Figures 184
Transformations: Translations, Rotations, and Reflections 185
The Pythagorean Theorem 186
Area of Triangles 187
Perimeter of Polygons 188
Area and Circumference of Circles 189
Area of Squares, Rectangles, and Parallelograms 190
Area of Trapezoids 191

Test Preparation 192
Answers of Worksheets – Chapter 12 194
Test Preparation Answers 195
Chapter 13: Solid Figures 196
Volume of Cubes and Rectangle Prisms 197
Surface Area of Cubes 198
Surface Area of a Prism 199
Volume of Pyramids and Cones 200
Surface Area of Pyramids and Cones 201
Test Preparation 202
Answers of Worksheets – Chapter 13 203
Chapter 14: Statistics 205
Mean, Median, Mode, and Range of the Given Data 206
First Quartile, Second Quartile and Third Quartile of the Given Data 207
Box and Whisker Plots 208
Bar Graph 209
Stem–And–Leaf Plot 210
The Pie Graph or Circle Graph 211
Scatter Plots 212
Test Preparation 213
Answers of Worksheets – Chapter 14 215
Chapter 15: Probability 220
Probability of Simple Events 221
Experimental Probability 222
Factorials 223
Permutations 224
Combination 225
Test Preparation 226
Answers of Worksheets – Chapter 15 227
Common Core Mathematics Practice Tests 230
Common Core Practice Test 1 231
Common Core Practice Test 2 251

Common Core Practice Tests Answers and Explanations 267

Chapter 1: Fractions and Decimals

Topics that you'll learn in this chapter:

- ✓ Simplifying Fractions
- ✓ Adding and Subtracting Fractions
- ✓ Multiplying and Dividing Fractions
- ✓ Adding Mixed Numbers
- ✓ Subtract Mixed Numbers
- ✓ Multiplying Mixed Numbers
- ✓ Dividing Mixed Numbers
- ✓ Comparing Decimals
- ✓ Rounding Decimals
- ✓ Adding and Subtracting Decimals
- ✓ Multiplying and Dividing Decimals
- ✓ Converting Between Fractions, Decimals and Mixed Numbers
- ✓ Factoring Numbers
- ✓ Greatest Common Factor
- ✓ Least Common Multiple
- ✓ Divisibility Rules

Simplifying Fractions

Helpful Hints

– Evenly divide both the top and bottom of the fraction by 2, 3, 5, 7, ... etc.
– Continue until you can't go any further.

Example:

$\frac{4}{12} = \frac{2}{6} = \frac{1}{3}$

Simplify the fractions.

1) $\frac{44}{72}$

2) $\frac{8}{10}$

3) $\frac{12}{18}$

4) $\frac{6}{8}$

5) $\frac{13}{39}$

6) $\frac{5}{20}$

7) $\frac{16}{36}$

8) $\frac{18}{36}$

9) $\frac{20}{50}$

10) $\frac{6}{54}$

11) $\frac{45}{81}$

12) $\frac{21}{28}$

13) $\frac{35}{56}$

14) $\frac{52}{64}$

15) $\frac{13}{65}$

16) $\frac{44}{77}$

17) $\frac{21}{42}$

18) $\frac{30}{72}$

19) $\frac{9}{24}$

20) $\frac{20}{80}$

21) $\frac{25}{45}$

Adding and Subtracting Fractions

Helpful Hints

– For "like" fractions (fractions with the same denominator), add or subtract the numerators and write the answer over the common denominator.
– Find equivalent fractions with the same denominator before you can add or subtract fractions with different denominators.
– Adding and Subtracting with the same denominator:

$$\frac{a}{b}+\frac{c}{b}=\frac{a+c}{b}$$
$$\frac{a}{b}-\frac{c}{b}=\frac{a-c}{b}$$

– Adding and Subtracting fractions with different denominators:

$$\frac{a}{b}+\frac{c}{d}=\frac{ad+cb}{bd}$$
$$\frac{a}{b}-\frac{c}{d}=\frac{ad-cb}{bd}$$

Add fractions.

1) $\frac{2}{3}+\frac{1}{2}$
2) $\frac{3}{5}+\frac{1}{3}$
3) $\frac{5}{6}+\frac{1}{2}$
4) $\frac{7}{4}+\frac{5}{9}$
5) $\frac{2}{5}+\frac{1}{5}$
6) $\frac{3}{7}+\frac{1}{2}$
7) $\frac{3}{4}+\frac{2}{5}$
8) $\frac{2}{3}+\frac{1}{5}$
9) $\frac{16}{25}+\frac{3}{5}$

Subtract fractions.

10) $\frac{4}{5}-\frac{2}{5}$
11) $\frac{3}{5}-\frac{2}{7}$
12) $\frac{1}{2}-\frac{1}{3}$
13) $\frac{8}{9}-\frac{3}{5}$
14) $\frac{3}{7}-\frac{3}{14}$
15) $\frac{4}{15}-\frac{1}{10}$
16) $\frac{3}{4}-\frac{13}{18}$
17) $\frac{5}{8}-\frac{2}{5}$
18) $\frac{1}{2}-\frac{1}{9}$

Multiplying and Dividing Fractions

Helpful Hints

– **Multiplying fractions:** multiply the top numbers and multiply the bottom numbers.

– **Dividing fractions:** Keep, Change, Flip

Keep first fraction, change division sign to multiplication, and flip the numerator and denominator of the second fraction. Then, solve!

Example:

$$\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times \mathrm{d}}$$

$$\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$$

Multiplying fractions. Then simplify.

1) $\frac{1}{5} \times \frac{2}{3}$

2) $\frac{3}{4} \times \frac{2}{3}$

3) $\frac{2}{5} \times \frac{3}{7}$

4) $\frac{3}{8} \times \frac{1}{3}$

5) $\frac{3}{5} \times \frac{2}{5}$

6) $\frac{7}{9} \times \frac{1}{3}$

7) $\frac{2}{3} \times \frac{3}{8}$

8) $\frac{1}{4} \times \frac{1}{3}$

9) $\frac{5}{7} \times \frac{7}{12}$

Dividing fractions.

10) $\frac{2}{9} \div \frac{1}{4}$

11) $\frac{1}{2} \div \frac{1}{3}$

12) $\frac{6}{11} \div \frac{3}{4}$

13) $\frac{11}{14} \div \frac{1}{10}$

14) $\frac{3}{5} \div \frac{5}{9}$

15) $\frac{1}{2} \div \frac{1}{2}$

16) $\frac{3}{5} \div \frac{1}{5}$

17) $\frac{12}{21} \div \frac{3}{7}$

18) $\frac{5}{14} \div \frac{9}{10}$