



2012 Curriculum Catalog

Mathematics 300

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Course Overview

Math 300 is a full-year elementary math course focusing on number skills and numerical literacy. In it, students will gain solid experience with number theory and operations, learning how to apply these in measurement situations. This course also integrates geometric concepts and skills throughout the units, as well as introducing students to statistical concepts.

By the end of the course, students will be expected to do the following:

- Understand place value and know how to compare and order numbers.
- Perform addition and subtraction, carrying and borrowing on whole numbers.
- Know basic multiplication facts.
- Understand representations in fraction and mixed number forms.
- Understand concepts of likelihood and basic probability.
- Understand concepts of shape, symmetry, and perimeter.
- Understand measurement concepts, including time and temperature.
- Understand representations using decimals and money.

UNIT 1: WHOLE NUMBERS	
Assignment Titles	
1. Course Overview	16. Quiz 3
2. Patterns: Digits and Number Words	17. Adding with Carrying
3. Place Value	18. Cardinal and Ordinal Numbers
4. Single-Digit Addition	19. Standard Measurement for Time
5. Single-Digit Subtraction	20. Calendar Time
6. Addition Problems	21. Quiz 4
7. Subtraction Problems	22. Unit Concept Review 1
8. Quiz 1	23. Unit Concept Review 2
9. Numbers on a Number Line	24. Practice: Addition and Subtraction
10. Pattern for Expanded Notation	25. Quiz 5
11. Adding Multi-digit Numbers	26. Special Project
12. Quiz 2	27. Review Game
13. Subtracting 3-Digit Numbers	28. Test
14. Measurement	29. Alternate Test
15. Operation Symbols	30. Reference

UNIT 2: NUMBER PATTERNS	
Assignment Titles	
1. Family of Facts	14. Money
2. Adding Ones, Tens, and Hundreds	15. Review: Borrowing
3. Subtracting Ones, Tens, and Hundreds	16. Addition: Checking Answers
4. Quiz 1	17. Subtraction: Checking Answers
5. Place Value and Number Words	18. Quiz 4
6. Addition with Carrying	19. Review: Number Order and Place Value
7. Skip Counting and Number Words	20. Review: Addition and Subtraction Facts
8. Quiz 2	21. Quiz 5
9. Skip Counting and Addition with Carrying	22. Special Project
10. Fractions	23. Review Game
11. Subtracting with Borrowing	24. Test
12. Quiz 3	25. Alternate Test
13. Shapes	26. Reference

UNIT 3: WHOLE NUMBERS AND FRACTIONS
Assignment Titles

1. Fact Families, Mental Math, and Addition	15. Fractions - Continued
2. Column Addition	16. Addition Practice
3. Addition: With and Without Carrying	17. Time: AM and PM
4. Quiz 1	18. Quiz 4
5. Measurements: Weight and Volume	19. Review: Addition, Subtraction, and Money
6. Fact Family, Place Value, and Number Order	20. Review: Story Problems, Lines, Shapes, and Measurement
7. Checking Addition Problems	21. Quiz 5
8. More Checking Addition Problems	22. Special Project
9. Quiz 2	23. Review Game
10. Subtraction with Borrowing	24. Test
11. Number Sentences and Symbols	25. Alternate Test
12. Subtraction with Borrowing and Checking	26. Reference
13. Quiz 3	
14. Fractions	

UNIT 4: PLACE VALUE
Assignment Titles

1. Numbers to Thousands Place	13. Roman Numerals
2. Addition and Skip Counting	14. Review: Subtraction with Borrowing
3. Quiz 1	15. Quiz 4
4. Rounding and Estimation	16. Review: Fractions
5. Subtraction with Borrowing	17. Review: Word Problems and Money
6. Measurement	18. Quiz 5
7. Quiz 2	19. Special Project
8. Number Words and Place Value	20. Review Game
9. Number Patterns	21. Test
10. Addition and Subtraction: Horizontal Form	22. Alternate Test
11. Quiz 3	23. Reference
12. Adding and Subtracting Fractions	

UNIT 5: MEASUREMENT, SHAPES, AND REVIEW
Assignment Titles

1. Operation Symbols and Number Sense	14. Odd And Even Numbers
2. Multi-Digit Addition And Subtraction	15. Review: Checking Addition
3. Cardinal and Ordinal Numbers	16. Review: Checking Subtraction
4. Quiz 1	17. Review: Roman Numerals and Fractions
5. Number Patterns Using Place Value	18. Quiz 4
6. Measuring Temperature	19. Review: Multiple Concepts
7. Quiz 2	20. Review: Story Problems
8. Operation Symbols	21. Quiz 5
9. Shapes and Symmetry	22. Special Project
10. Rounding and Estimating	23. Review Game
11. Finding Perimeter	24. Test
12. Quiz 3	25. Alternate Test
13. Multi-Digit Addition and Subtraction	26. Reference

UNIT 6: MULTIPLICATION, ADDITION, AND SUBTRACTION
Assignment Titles

1. Multi-Digit Addition	13. Lines, Angles, and Temperature
2. Skip Counting and Multiplication	14. Review: Addition and Subtraction
3. Review: Telling Time	15. Quiz 4
4. Quiz 1	16. Story Problems
5. Review: Subtraction	17. Multiple Concept Review
6. Perimeter and Area	18. Review: Calendar
7. Review: Fractions	19. Quiz 5
8. Quiz 2	20. Special Project
9. Addition and Equivalent Fractions	21. Review Game
10. Money Computation and Roman Numerals	22. Test
11. Quiz 3	23. Alternate Test
12. Multiplication	24. Reference

UNIT 7: OPERATIONS, LIKELIHOOD, AND PROBABILITY
Assignment Titles

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|---|------------------------------|
| 1. Review: Place Value | 13. Quiz 3 |
| 2. Review: Subtraction with Borrowing | 14. Review: Money |
| 3. Multiplication Facts (1) | 15. Multiplication Facts (2) |
| 4. Quiz 1 | 16. Quiz 4 |
| 5. Measurement | 17. Multiple Concept Review |
| 6. Practicing Subtraction with Borrowing | 18. Quiz 5 |
| 7. Mixed Numbers | 19. Special Project |
| 8. Quiz 2 | 20. Review Game |
| 9. Review: Expanded Notation and Roman Numerals | 21. Test |
| 10. Probability and Likelihood | 22. Alternate Test |
| 11. Math Facts | 23. Reference |
| 12. Symmetry | |

UNIT 8: MEASUREMENT, FRACTIONS, AND DECIMALS
Assignment Titles

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|--|------------------------------------|
| 1. Shapes, Measurement, and Addition | 12. Multiple Concept Practice |
| 2. Time and Measurement | 13. Review: Addition With Checking |
| 3. Quiz 1 | 14. Quiz 4 |
| 4. Fractions, Odd and Even Number Patterns | 15. Word Problems |
| 5. Decimals | 16. Using Graphs |
| 6. Money Problems | 17. Quiz 5 |
| 7. Quiz 2 | 18. Special Project |
| 8. Fractions, Place Value, and Measurement | 19. Review Game |
| 9. Directions | 20. Test |
| 10. Quiz 3 | 21. Alternate Test |
| 11. Multiplication Facts | 22. Reference |

UNIT 9: REVIEW: MULTIPLE CONCEPTS
Assignment Titles

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|---|-----------------------------|
| 1. How Numbers Work | 13. Quiz 3 |
| 2. Math Facts | 14. Symmetry and Shapes |
| 3. Add/Subtract with Checking | 15. Roman Numerals |
| 4. Multiplication | 16. Quiz 4 |
| 5. Quiz 1 | 17. Likelihood and Graphing |
| 6. Equivalent Fractions | 18. Problem Solving |
| 7. Reading and Writing Fractions | 19. Quiz 5 |
| 8. Fraction Computation | 20. Special Project |
| 9. Quiz 2 | 21. Review Game |
| 10. Measure: Length, Perimeter, and Area | 22. Test |
| 11. Measure: Money, Time, and Temperature | 23. Alternate Test |
| 12. Measure: Weight and Volume | Reference |

UNIT 10: BASIC MATH REVIEW
Assignment Titles

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|--|---|
| 1. Review: Rounding and Estimation | 13. Review: Shapes and Symmetry |
| 2. Review: Adding Fractions | 14. Review: Roman Numerals |
| 3. Review: Subtracting Fractions | 15. Review: Measurement |
| 4. Review: Multiplication Facts | 16. Quiz 4 |
| 5. Quiz 1 | 17. Review: Number Symbols and Grouping |
| 6. Review: Mental Math, Graphs, Likelihood | 18. Review: Perimeter and Area |
| 7. Review: Addition and Subtraction Computation | 19. Review: Problem Solving |
| 8. Quiz 2 | 20. Quiz 5 |
| 9. Review: Fractions and Decimals | 21. Special Project |
| 10. Review: Add and Subtract Mixed Numbers and Fractions | 22. Review Game |
| 11. Review: Finding Missing Numbers | 23. Test |
| 12. Quiz 3 | 24. Alternate Test |
| | 25. Reference |