



2016 - 2017 Curriculum Catalog
Mathematics 300

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Mathematics 300 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	
Assignments	
Mathematics 300	1. Course Overview
	2. Patterns: Digits and Number Words
	3. Place Value
	4. Single-Digit Addition
	5. Single-Digit Subtraction
	6. Addition Problems
	7. Subtraction Problems
	8. Quiz 1
	9. Numbers on a Number Line
	10. Pattern for Expanded Notation
	11. Adding Multi-digit Numbers
	12. Quiz 2
	13. Subtracting 3-Digit Numbers
	14. Measurement
	15. Operation Symbols
16. Quiz 3	
17. Adding with Carrying	
18. Cardinal and Ordinal Numbers	
19. Standard Measurement for Time	
20. Calendar Time	
21. Quiz 4	
22. Unit Concept Review 1	
23. Unit Concept Review 2	
24. Practice: Addition and Subtraction	
25. Quiz 5	
26. Special Project*	
27. Review Game	
28. Test	
29. Alternate Test*	
30. Reference	

Unit 2: Number Patterns	
Assignments	
Mathematics 300	1. Family of Facts
	2. Adding Ones, Tens, and Hundreds
	3. Subtracting Ones, Tens, and Hundreds
	4. Quiz 1
	5. Place Value and Number Words
	6. Addition with Carrying
	7. Skip Counting and Number Words
	8. Quiz 2
	9. Skip Counting and Addition with Carrying
	10. Fractions
	11. Subtracting with Borrowing
	12. Quiz 3
	13. Shapes
14. Money	
15. Review: Borrowing	
16. Addition: Checking Answers	
17. Subtraction: Checking Answers	
18. Quiz 4	
19. Review: Number Order and Place Value	
20. Review: Addition and Subtraction Facts	
21. Quiz 5	
22. Special Project*	
23. Review Game	
24. Test	
25. Alternate Test*	
26. Reference	

Unit 3: Whole Numbers and Fractions	
Assignments	
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	
Assignments	
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	
Assignments	
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		
Assignments		
Mathematics 300	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		
Assignments		
Mathematics 300	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		
Assignments		
Mathematics 300	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		
Assignments		
Mathematics 300	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	24. Reference

Unit 10: Basic Math Review		
Assignments		
Mathematics 300	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	

(*) Indicates alternative assignment