

FOUNDATIONS OF REAL WORLD MATH: SESSION 1

Course Description

This course is a Pre-Algebra course which provides students with methods to strengthen their foundations of Pre-Algebra skills and concepts in order to prepare them for Algebra 1. This course is the first half of Foundations of Real World Math and focuses on number properties, greatest common factor, least common multiple, integer operations, exponent basics, order of operations, fractions operations, and decimal operations. This course will culminate with a Final Exam.

Prerequisite

None

Credit Requirement Area

Math

Learning Objectives

Students will study and master the following concepts:

- apply the associative law of addition and multiplication
- apply the commutative law of addition and multiplication
- apply the identity property of addition and multiplication
- apply the inverse property of addition and multiplication
- apply the zero property of addition and multiplication
- apply the distributive property
- find the greatest common factor and least common multiple of whole numbers
- calculate basic exponents
- calculate problems using negative numbers
- apply the order of operations to simplify expressions
- recognize equivalent fractions and fractions in lowest terms
- recognize various forms of a fraction
- convert between mixed numbers and improper fractions
- determine how to find the least common denominator between fractions
- use equivalent fractions to add and subtract fractions and mixed numbers with like and unlike denominators
- determine how to solve multiplication and divisions problems with fractions and mixed numbers
- recognize the place value of decimals
- apply rounding and estimation concepts with decimals
- convert between fraction and decimals
- perform operations with multi-digit whole numbers and with decimals

Suggested Weekly Schedule

Week	Graded Activities	Suggested Due Date	% Points
1	Activity 1: Addition Property Recognition	Monday of Week 1	14.3%
	Activity 2: Perimeter Review	Monday of Week 1	14.3%

Week	Graded Activities	Suggested Due Date	% Points
	Activity 3: Multiplication Property Recognition	Tuesday of Week 1	14.3%
	Activity 4: Area and Application Review	Tuesday of Week 1	14.3%
	Activity 5: Multiplying and Dividing by Zero	Wednesday of Week 1	14.3%
	Activity 6: Distributive Property	Thursday of Week 1	14.3%
	Week 1 Reflection	Friday of Week 1	14.2%
Week 1 Total Percentage Towards Final Grade			17%
2 & 3	Activity 7: Greatest Common Divisor/Factor	Monday of Week 2	8.3%
	Activity 8: Least Common Multiple	Tuesday of Week 2	8.3%
	Activity 9: Interpreting Integers Word Problems	Wednesday of Week 2	8.3%
	Activity 10: Adding Integers	Thursday of Week 2	8.3%
	Activity 11: Subtracting Integers	Thursday of Week 2	8.3%
	Activity 12: Multiplying Integers	Friday of Week 2	8.3%
	Activity 13: Dividing Integers	Friday of Week 2	8.3%
	Activity 14: Exponents	Monday of Week 3	8.3%
	Activity 15: Introduction to Order of Operations	Tuesday of Week 3	8.4%
	Activity 16: Order of Operations	Wednesday of Week 3	8.4%
	Activity 17: Order of Operations and Fractions	Thursday of Week 3	8.4%
	Week 2 & 3 Reflection	Friday of Week 3	8.4%
Week 2 & 3 Total Percentage Towards Final Grade			34%
4	Activity 18: Equivalent Fractions	Monday of Week 4	11.1%
	Activity 19: Proper Fractions, Improper Fractions, and Mixed Numbers	Monday of Week 4	11.1%
	Activity 20: Additions and Subtraction of Fractions with Like Denominators	Tuesday of Week 4	11.1%
	Activity 21: Adding and Subtracting Fractions with Unlike Denominators	Wednesday of Week 4	11.1%
	Activity 22: Applications of Mixed Numbers	Wednesday of Week 4	11.1%
	Activity 23: Multiplying Fractions	Thursday of Week 4	11.1%
	Activity 24: Dividing Fractions	Thursday of Week 4	11.1%
	Activity 25: Multiplying and Dividing Mixed Fractions	Friday of Week 4	11.1%
	Week 4 Reflection	Friday of Week 4	11.2%
Week 4 Total Percentage Towards Final Grade			17%
5	Activity 26: Decimal Place Values	Monday of Week 5	9.1%

Week	Graded Activities	Suggested Due Date	% Points
	Activity 27: Rounding Decimals	Monday of Week 5	9.1%
	Activity 28: Comparing Decimals	Monday of Week 5	9.1%
	Activity 29: Converting a Fraction to a Decimal	Tuesday of Week 5	9.1%
	Activity 30: Converting a Decimal to a Fraction	Wednesday of Week 5	9.1%
	Activity 31: Converting Repeating Decimals to Fractions	Wednesday of Week 5	9.1%
	Activity 32: Adding and Subtracting Decimals	Thursday of Week 5	9.1%
	Activity 33: Adding and Subtracting Signed Decimals	Thursday of Week 5	9.1%
	Activity 34: Multiplying Signed Decimals	Friday of Week 5	9.1%
	Activity 35: Dividing Signed Decimals	Friday of Week 5	9.1%
	Week 5 Reflection	Friday of Week 5	9%
Week 5 Total Percentage Towards Final Grade			17%
6	Foundations of Real World Math: Session 1 Final Exam	Friday of Week 6	100%
Week 6 Total Percentage Towards Final Grade			15%
WEIGHTED TOTAL			100%