

## PREALGEBRA – PART 1

### Session 1: Properties Arithmetic

- Addition  
*Commutative Property,  
Associative Property,  
Distributive Property*
- Multiplication

### Session 2: Properties of Arithmetic

- Negations
- Subtraction
- Reciprocals
- Division

### Session 3: Exponents

- Powers
- Higher Exponents

### Session 4: Exponents

- Zero as an Exponent
- Negative Exponents

### Session 5: Number Theory

- Primes
- Composites
- Fundamental Theorem  
of Arithmetic
- Multiples
- Divisibility Tests

### Session 6: Number Theory

- Prime Factorization
- Greatest Common Divisor
- Lowest Common Multiple

### Session 7: Fractions

- Simplifying
- Multiplication
- Reciprocation
- Division

### Session 8: Review

### Session 9: Fractions

- Raising Fractions to Powers
- Simplest Form
- Comparing Fractions
- Adding and Subtracting  
Fractions
- Mixed Numbers

### Session 10: Expressions & Linear Equations

- Terminology  
*Term, Coefficient, Constant  
Equivalent, Simplify*
- Solving Linear Equations

### Session 11: Word Problems & Inequalities

- Word Problems
- Inequalities (strict & nonstrict)

### Session 12: Decimal Arithmetic

- Decimals & Base-10
- Rounding

### Session 13: Decimals & Fractions

- Conversion
- Repeating Decimals
- Irrational Numbers

### Session 14: Ratios & Proportions

- Ratios
- Multi-way Ratios
- Proportions

### Session 15: Conversions Speed & Rates

- Conversions
- Speed
- Rates

### Session 16: Review