

Instructional Algebra			
CONCEPT	SKILLS	Chapter	Teaching Notes
I. Algebra and Whole Numbers		1	
	1. adding whole numbers		This chapter will be used to assess basic math skills for student I.E.P. goals and math interventions.
	2. subtracting whole numbers		
	3. estimating Sums and Differences		
	4. multiplying whole numbers		
	5. dividing whole numbers		
	6. estimating products and quotients		
	7. arithmetic and algebra		
	8. representing numbers using letters		
	9. replacing variables		
II. Using Decimals		2	
	1. place value		
	2. comparing and rounding decimals		
	3. adding and subtracting decimals		
	4. multiplying decimals by powers of 10		
	5. multiplying decimals		
	6. dividing decimals by powers of 10		
	7. dividing decimals		
	8. decimals and fractions		
	9. repeating decimals		
	10. renaming percents to decimals		
	11. evaluating expressions with decimals		
III. Number Theory		3	
	1. divisibility rules		
	2. prime and composite numbers		
	3. greatest common divisor		
	4. factoring		
	5. least common multiple		
	6. scientific notation		
IV. Rational Numbers and Fractions		4	
	1. proper fractions		
	2. improper fractions and mixed numbers		
	3. equivalent fractions		
	4. simplest form		
	5. comparing and ordering fractions		
	6. fractions like denominators		
	7. fraction unlike denominators		
	8. subtracting fractions with regrouping		
	9. multiplying fractions and mixed numbers		
	10. dividing fractions and mixed numbers		

V. Basics Operations and Rational Numbers		5	
	1. the order of operations		
	2. evaluating algebraic expressions		
	3. equations solution by substitution		
	4. solving addition equation		
	5. solving subtraction equations		
	6. complex fractions		
	7. simplifying by addition		
	8. simplifying by subtraction		
	9. multiplying rational expressions		
VI. Ratios, Proportions, and Percent		6	
	1. ratios		
	2. proportions		
	3. ratios and proportions		
	4. percents and fractions		
	5. percents and decimals		
	6. finding the percent of the number		
	7. finding the percent		
	8. percent of increase and decrease		
	9. formulas and percents		
VII. Integers		7	
	1. the real number line and integers		
	2. comparing integers greater than		
	3. comparing integers less than		
	4. even and odd integers		
	5. adding positive integers		
	6. adding negative integers		
	7. subtracting positive and negative integers		
	8. multiplying by positive integers		
	9. multiplying by negative integers		
	10. dividing positive and negative integers		
VIII. Exponents, Square Roots, and the Pythagorean Theorem		8	
	1. exponents		
	2. multiplying with exponents		
	3. dividing with exponents		
	4. squares		
	5. cubes		
	6. square roots		
	7. irrational numbers and square roots		
	8. Pythagorean theorem		
	9. more about triangles		
IX. Equations from Geometry		9	
	1. perimeters of polygons		

	2. perimeters of regular polygons		
	3. perimeters of irregular polygons		
	4. areas of rectangles and squares		
	5. areas of triangles		
	6. areas of trapezoids and parallelgrams		
	7. areas of irregular polygons		
	8. volume		
	9. circumferences and areas of circles		
	10. volumes of cylinders and spheres		
X. Graphing		10	
	1. graphing equalities		
	2. graphing inequalities		
	3. graphing solutions of equalities		
	4. graphing solutions of inequalities		
	5. the coordinate system locating points		
	6. the coordinate system plotting points		
	7. determining the points of the line		
	8. graphing lines		
	9. the slope of the line		
	10. formula for the slope of the line		
	11. the slope-intercept form of a line		
XI. Geometry		11	
	1. angles and angle measures		
	2. identifying and classifying angles		
	3. complementary and supplementary angles		
	4. angle measure in a triangle		
	5. naming triangles		
	6. congruent triangles		
	7. similar triangles		
	8. parallelograms		
	9. quadrilaterals and diagonals		
	10. polygons and diagonals		
XII. Data, Statistics, and Probability		12	
	1. bar graphs		
	2. circle graphs		
	3. frequency tables		
	4. mean		
	5. median		
	6. mode		
	7. range		
	8. box-and-whiskers plots		
	9. the probability fraction		
	10. the fundamental principle of counting		
Current Text:			

Pre-Algebra			
AGS Publishing			
pub. 2004			

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6.C.5
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6.C.5
6.C.5
6.B.4
6.C.4
6.D.4 / 7.C.4c
6.D.4 / 7.A.4a / 7.A.4b
6.D.4 / 7.A.4a / 7.A.4b
6.D.4 / 6.B.5 / 8.B.5
6.D.4 / 6.B.5
6.D.4 / 8.A.4a / 8.B.4a / 6.B.5
6.D.4 / 8.A.4a
6.D.4 / 8.A.4a
6.D.4 / 8.A.4a
6.D.4
6.D.4
6.B.4
6.C.4
8.A.4b / 6.B.5 / 8.A.5
8.A.4b / 8.A.5
8.A.4b / 8.A.5 / 8.B.5
6.A.4 / 8.A.4b / 8.A.5 / 8.B.5
8.A.4b / 8.A.5 / 8.B.5
8.A.4b / 6.B.5 / 8.A.5 / 8.B.5
6.B.4 / 8.A.5 / 8.B.5
6.C.4
6.C.5
6.C.5 / 7.C.5a
6.C.5
6.C.5
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6.D.4 / 8.B.4a
6.D.4
6.C.5
6.C.5 / 7.C.5a
6.B.4
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6.C.5
6.C.5
6.A.4 / 8.B.4a
6.C.5
6.C.5
6.C.5
6.C.5 / 7.C.5a
6.C.5
6.B.4
6.C.4
6.D.4 / 6.D.5
6.D.4 / 7.C.4a / 6.D.5
6.D.4 / 7.C.4a / 6.D.5
6.D.4 / 6.D.5
6.D.4 / 8.B.4a
6.D.4
6.C.5
6.C.5
6.C.5
6.B.4
6.C.4
7.A.4b / 8.B.4b
8.B.4b
8.B.4b
7.A.4b / 8.B.4b
7.A.4b / 8.B.4b
8.B.4b
8.B.4a / 8.B.4b
8.B.4b
8.B.4b
7.A.4b / 8.B.4b
6.B.4
6.C.4
6.C.5 / 8.B.5
8.B.4a / 8.B.5
6.C.5 / 8.B.5
6.C.5 / 7.C.5a / 8.B.5 / 9.A.5 / 9.C.5b
7.A.4a / 7.C.5a / 8.B.5 / 9.A.5 / 9.C.5b
6.C.5 / 7.C.5a / 8.B.5
6.C.5
6.C.5
6.C.5 / 7.C.5a
6.B.4
6.C.4
7.A.4a / 7.A.4b / 9.B.4 / 6.B.5 / 9.A.5 / 9.C.5b

7.A.4b / 9.B.4 / 6.B.5 / 8.C.5 / 9.A.5 / 9.C.5b

7.A.4b / 9.B.4 / 6.B.5 / 8.C.5

7.A.4a / 7.A.4b / 9.B.4 / 6.B.5 / 8.C.5 / 9.A.5 / 9.C.5b

6.A.4 / 7.A.4b / 9.B.4 / 6.B.5 / 8.C.5 / 9.A.5 / 9.C.5b

7.A.4b / 9.B.4 / 9.C.5b

7.A.4b / 8.B.4a / 8.B.4a / 9.B.4 / 9.C.5b

7.A.4a / 7.A.4b / 9.B.4 / 9.C.5b

7.A.4a / 7.A.4b / 9.B.4 / 9.A.5

7.A.4a / 7.A.4b / 9.B.4 / 9.A.5

6.B.4 / 9.C.5b

6.C.4

8.B.4a

8.B.4a / 8.D.4

8.B.4a / 8.D.4 / 9.C.5b

8.B.4a / 8.D.4 / 9.C.5b

8.B.4a / 9.C.5b

8.B.4a / 9.C.5b

8.B.4a

8.B.4a

7.B.4 / 8.B.4a

7.B.4 / 8.B.4a

7.B.4 / 8.B.4a / 9.C.5b

6.B.4

6.C.4

7.A.4b / 9.B.4

9.B.4

9.B.4

7.A.4a / 7.A.4b / 9.B.4 / 7.C.5a / 9.A.5 / 9.C.5b

7.A.4a / 7.A.4b / 9.B.4

9.B.4

6.D.4 / 8.D.4 / 9.B.4 / 9.D.4

6.D.4 / 8.D.4 / 9.B.4 / 10.A.4a / 10.B.4 / 9.C.5b

6.D.4 / 9.B.4 / 10.A.4a / 10.A.4c / 10.B.4

9.B.4 / 10.A.4a / 10.A.4c / 10.B.4

6.B.4 / 10.A.4a / 10.A.4c / 10.B.4

6.C.4

8.B.4a / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 9.C.4a / 9.C.4b / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4b / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4b / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4b / 10.A.4c / 10.B.4 / 10.B.5

6.D.4 / 8.B.4a / 9.C.4a / 9.C.4b / 10.A.4b / 10.A.4c / 10.B.4 / 10.B.5

8.B.4a / 10.A.4c / 10.B.4 / 10.C.4a / 10.C.4c / 10.B.5 / 10.C.5a / 10.C.5b / 10.C.5c

8.B.4a / 9.C.4a / 9.C.4b / 10.A.4c / 10.B.4 / 10.C.4a / 10.B.5 / 10.C.5a / 10.C.5b / 10.C.5c

6.B.4

6.C.4
