

**YOSEMITE HIGH SCHOOL**  
**50200 ROAD 427 - OAKHURST, CA 93644**  
**(559) 683-4667**

COURSE TITLE: ALGEBRA PREP  
DEPARTMENT: MATHEMATICS

<u>REQUIREMENT SATISFIED:</u>			
High School:	X	Model Curriculum Standards:	X
State College:		Frameworks:	X
UC Approved:			

GRADE LEVEL: 9-10                      LENGTH OF COURSE: 1 SEMESTER                      CREDITS: 5

PREREQUISITE: 6.5 grade level or below and teacher recommendation

TEXTBOOKS:

INSTRUCTIONAL MATERIALS: Accelerated Math Software

COURSE DESCRIPTION:

The Algebra Preparation course will cover review topics from 6<sup>th</sup> through 8<sup>th</sup> grade standards and students will begin working on pre-algebra topics to prepare them for Algebra A.

COURSE OUTLINE/ALIGNMENT TO CALIFORNIA STATE STANDARDS AND EXPECTED SCHOOLWIDE LEARNING RESULTS:

NS = Number Sense

<u>Accelerated Math Objective</u>	<u>Assignment Course Content/Objective</u>	<u>Standards Addressed*</u>	<u>ESLRS</u>
6	Order whole numbers (6+ digits)	1 NS	1,2,3,4,6
7	Compare whole Numbers (5+ digits)	1 NS	1,2,3,4,6
15	Add whole numbers	2 NS	1,2,3,4,6
17	Subtract whole numbers	2 NS	1,2,3,4,6
18	Word problems: Add and subtract whole Numbers	2 NS	1,2,3,4,6
20	Multiply by 2 or more digits	2 NS	1,2,3,4,6
21	Word Problems: Multiply whole numbers	2 NS	1,2,3,4,6
22	Multiply by a multiple of 10	2 NS	1,2,3,4,6
23	Multiply by a power of 10	2 NS	1,2,3,4,6
28	Divide whole numbers (2+ digit divisor)	2 NS	1,2,3,4,6
29	Word Problems: Divide whole numbers	2 NS	1,2,3,4,6
33	Order of operations	2 NS	1,2,3,4,6
34	Simplify with grouping symbols	2 NS	1,2,3,4,6
40	Decimal standard form to word name	1 NS	1,2,3,4,6
41	Word name to decimal standard form	1 NS	1,2,3,4,6
43	Order decimals	1 NS	1,2,3,4,6
44	Compare decimals	1 NS	1,2,3,4,6
46	Add money expressions	1 NS	1,2,3,4,6
48	Add Decimals	1 NS	1,2,3,4,6
50	Subtract money expressions	1 NS	1,2,3,4,6
52	Subtract decimals	1 NS	1,2,3,4,6

ALGEBRA PREP

COURSE OUTLINE/ALIGNMENT TO CALIFORNIA STATE STANDARDS AND EXPECTED SCHOOLWIDE  
LEARNING RESULTS: (Continued)

NS = Number Sense

<u>Accelerated Math Objective</u>	<u>Assignment Course Content/Objective</u>	<u>Standards Addressed*</u>	<u>ESLRS</u>
60	Multiply money expressions by whole numbers	1 NS	1,2,3,4,6
62	Multiply decimals by whole numbers (2-3 digits)	1 NS	1,2,3,4,6
63	Multiply decimals (to thousandths)	1 NS	1,2,3,4,6
65	Multiply decimals by a power of 10	1 NS	1,2,3,4,6
67	Divide money expressions by 2-digit whole number	1 NS	1,2,3,4,6
69	Divide decimals by 1 and 2 digit whole number	1 NS	1,2,3,4,6
71	Divide whole numbers by powers of 10	1 NS	1,2,3,4,6
72	Divide decimals by powers of 10	1 NS	1,2,3,4,6
74	Divide whole numbers by decimals	1 NS	1,2,3,4,6
76	Divide decimals by decimals	1 NS	1,2,3,4,6
84	Model fractions of wholes	1 NS	1,2,3,4,6
85	Model fractions of sets	1 NS	1,2,3,4,6
86	Model fractions and mixed numbers on number lines	1 NS	1,2,3,4,6
87	Simplify fractions	1 NS	1,2,3,4,6
88	Equivalent fractions	1 NS	1,2,3,4,6
89	Proper and improper fractions	1 NS	1,2,3,4,6
90	Mixed numbers to improper fractions	1 NS	1,2,3,4,6
91	Improper fractions to mixed numbers	1 NS	1,2,3,4,6
92	Order fractions	1 NS	1,2,3,4,6
93	Compare fractions	1 NS	1,2,3,4,6
94	Find reciprocals	1 NS	1,2,3,4,6
95	Add like fractions	1 NS	1,2,3,4,6
96	Add like fractions and mixed numbers	1 NS	1,2,3,4,6
98	Add unlike fractions	1 NS	1,2,3,4,6
99	Add unlike mixed numbers	1 NS	1,2,3,4,6
103	Subtract like fractions	1 NS	1,2,3,4,6
104	Subtract like mixed numbers	1 NS	1,2,3,4,6
105	Subtract unlike fractions	1 NS	1,2,3,4,6
106	Subtract unlike mixed numbers, no regroup	1 NS	1,2,3,4,6
107	Subtract mixed numbers from whole numbers	1 NS	1,2,3,4,6
108	Subtract mixed numbers, regroup	1 NS	1,2,3,4,6
112	Multiply fractions	1 NS	1,2,3,4,6
113	Multiply fractions by whole numbers	1 NS	1,2,3,4,6
115	Multiply mixed numbers by fractions	1 NS	1,2,3,4,6
116	Multiply mixed numbers	1 NS	1,2,3,4,6
118	Divide fractions	1 NS	1,2,3,4,6

COURSE OUTLINE/ALIGNMENT TO CALIFORNIA STATE STANDARDS AND EXPECTED SCHOOLWIDE  
LEARNING RESULTS: (Continued)

NS = Number Sense

<u>Accelerated Math Objective</u>	<u>Assignment Course Content/Objective</u>	<u>Standards Addressed*</u>	<u>ESLRS</u>
119	Divide mixed numbers by fractions	1 NS	1,2,3,4,6
120	Divide mixed numbers	1 NS	1,2,3,4,6
121	Divide whole numbers and fractions	1 NS	1,2,3,4,6
186	Fractions to decimals	1 NS	1,2,3,4,6
187	Decimals to fractions	1 NS	1,2,3,4,6
188	Decimals to mixed numbers	1 NS	1,2,3,4,6
189	Mixed numbers to decimals	1 NS	1,2,3,4,6
190	Decimals to percents	1 NS	1,2,3,4,6
191	Percents to decimals	1 NS	1,2,3,4,6
192	Percents to fractions	1 NS	1,2,3,4,6
193	Fractions to percents	1 NS	1,2,3,4,6
195	Ratio as fraction, lowest terms	1 NS	1,2,3,4,6
197	Ratio as rate, lowest terms	1 NS	1,2,3,4,6
199	Equivalent ratios	1 NS	1,2,3,4,6
203	Ratios as proportions	1 NS	1,2,3,4,6
204	Solve Proportions	1 NS	1,2,3,4,6

DISTRICT/STATE CONTENT STANDARDS ADDRESSED:

**Grade 6- Number Sense**

1. Students compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, percentages:
  - 1.1 Compare and order positive and negative fractions, decimals, and mixed numbers and place them on a number line.
  - 1.4 Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips.
2. Students calculate and solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.
  - 2.1 Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.
  - 2.2 Explain the meaning of multiplication and division of positive fractions and perform the calculations
  - 2.3 Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, that use positive and negative integers and combinations of these operations.

- 2.4 Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions (e.g., to find a common denominator to add two fractions or to find the reduced form for a fraction).

**Grade 6- Mathematical Reasoning**

2. Students use strategies, skills, and concepts in finding solutions:

2.1 Use estimation to verify the reasonableness of calculated results.

OUTCOMES:

Students will demonstrate basic competency in course standards by achieving a minimum 60% proficiency on coursework or by passing the final exam.

INSTRUCTIONAL STRATEGIES:

Direct instruction  
Group work  
Individual instruction  
Peer tutoring

ASSESSMENT:

Teacher prepared tests and quizzes  
Department-wide benchmark assessments including unit, mid-term, and final exams  
Review of student work samples including class work and homework.  
Student demonstrations  
Other informal assessments

12/00  
Revised: 1/04