



## Course Description - Saxon Math 8/7

**Saxon Math 8/7** (3<sup>rd</sup> edition) reviews arithmetic calculation, measurements, geometry and other skills, and introduces pre-algebra, ratios, probability and statistics. Students will specifically learn about adding/subtracting/multiplying fractions, equivalent fractions, the metric system, repeating decimals, scientific notation, Pi, graphing inequalities, multiplying algebraic terms, the Pythagorean Theorem, the slope-intercept form of linear equations, and more. (120 Lessons plus 12 Investigations)

## Table of Contents – Saxon Math 8/7

Lesson	Title
1	Arithmetic with Whole Numbers and Money/Variables and Evaluation
2	Properties of Operations/Sequences
3	Missing Numbers in Addition/ Missing Numbers in Subtraction/ Missing Numbers in Multiplication/ Missing Numbers in Division
4	Number Line
5	Place Value through the Hundred Trillions/Reading and Writing Whole Numbers
6	Factors/ Divisibility
7	Lines/Angles
8	Fractions and Percents/Inch Ruler
9	Adding and subtracting fractions/ Multiplying Fractions/ Reciprocals
10	Writing Division Answers as Mixed Numbers/ Improper Fractions
Investigation 1	Investigating Fractions and Percents with Manipulatives
11	Problems about Combining/Problems about Separating
12	Problems about Comparing/Elapsed Time problems
13	Problems about Equal Groups
14	Problems about Part of a Whole
15	Equivalent fractions/ Reducing Fractions, part 1
16	U.S. Customary System
17	Measuring Angles with a Protractor
18	Polygons/ Similar and Congruent

19	Perimeter
20	Exponents/ Rectangular Area, part 1/ Square Root
Investigation 2	Using a Compass and Straightedge, Part 1
21	Prime and Composite Numbers/Prime Factorization
22	Problems about a Fraction of a Group
23	Subtracting Mixed Numbers with Regrouping
24	Reducing Fractions, part 2
25	Dividing Fractions
26	Multiplying and Dividing Mixed numbers
27	Multiples/ Least Common Multiple/Equivalent division problems
28	Two Step Word Problems/Average, part 1
29	Rounding Whole Numbers/ Rounding Mixed Numbers/Estimating Answers
30	Common denominators/ Adding and Subtracting Fractions with Different Denominators
Investigation 3	The Coordinate Plane
31	Reading and Writing Decimal Numbers
32	Metric System
33	Comparing Decimals/Rounding Decimals
34	Decimal Numbers on the Number Line
35	Adding, Subtracting, Multiplying and Dividing Decimal Numbers
36	Ratio/Simple Probability
37	Area of a Triangle/ Rectangular Area, part 2
38	Interpreting Graphs
39	Proportions
40	Sum of the Angle Measures of a Triangle/ Angle Pairs
Investigation 4	Stem-and-Leaf Plot/ Box-and-Whisker Plot
41	Using Formulas/Distributive Property
42	Repeating Decimals
43	Converting Decimals to Fractions/Converting Fractions to Decimals/ Converting Percents to Decimals
44	Division Answers
45	Dividing by a Decimal Number
46	Unit Rate and Other Rates/ Sales Tax
47	Powers of 10
48	Fraction Decimal Percent Equivalent
49	Adding Mixed measures
50	Unit Multipliers and Unit Conversions
Investigation 5	Creating Graphs
51	Scientific Notation for Large Numbers
52	Order of Operations
53	Multiplying Rates

54	Ratio Word Problems
55	Average Part 2
56	Subtracting Mixed Measures
57	Negative Exponents/Scientific Notation for Small Numbers
58	Line Symmetry/ Functions, part 1
59	Adding Integers on the Number Line
60	Fractional part of a Number, part 1/ Percent of a Number, part 1
Investigation 6	Classifying Quadrilaterals
61	Area of a Parallelogram/ Angles of a Parallelogram
62	Classifying Triangles
63	Symbols of Inclusion
64	Adding Signed Numbers
65	Ratio Problems Involving Totals
66	Circumference and Pi
67	Geometric Solids
68	Algebraic Addition
69	More on Scientific Notation
70	Volume
Investigation 7	Balanced Equations
71	Finding a whole group when a fraction is known
72	Implied Ratios
73	Multiplying and Dividing Signed Numbers
74	Fractional Part of a Number, part 2
75	Area of a Complex Figure
75	Area of a Trapezoid
76	Complex Fractions
77	Percent of a Number, part 2
78	Graphing Inequalities
79	Insufficient Information/Qualitative Comparison
80	Transformations
Investigation 8	Using a Compass and Straightedge, Part 2
81	Using proportions to solve percent problems
82	Area of a Circle
83	Multiplying Powers of 10/Multiplying Numbers in Scientific Notation
84	Algebraic Terms
85	Order of Operations with Signed Numbers
85	Function, part 2
86	Number Families
87	Multiplying Algebraic Terms
88	Multiple Units of Measure
88	Converting Units of Area

89	Diagonals, Interior Angles, Exterior Angles
90	Mixed Number Coefficients, Negative Coefficients
Investigation 9	Graphing Functions
91	Evaluation with Signed Numbers/ Signed Numbers without Parentheses
92	Percent of Change
93	Two-Step Equations and Inequalities
94	Compound Probability
95	Volume of a Right Solid
96	Estimating Angles/ Distributive property with Algebraic Terms
97	Similar Triangles/ Indirect Measure
98	Scale/ Scale Factor
99	Pythagorean Theorem
100	Estimating Square Roots/ Irrational Numbers
Investigation 10	Probability, Chance and Odds
101	Translating Expressions into Equations
102	Transversals/Simplifying Equations
103	Powers of Negative Numbers/ Dividing Terms
104	Semicircles, Arcs and Sectors
105	Surface area of right solids/ Surface area of a sphere/ More on Roots
106	Solving Literal Equations and Transforming Formulas
107	Slope
108	Formulas and Substitution
109	Equations with Exponents
110	Simple Interest and Compound Interest/ Successive Discounts
Investigation 11	Scale Factor in Surface Area and Volume
111	Dividing in Scientific Notation
112	Applications of the Pythagorean Theorem
113	Volume of Pyramids, Cones and Spheres
114	Graphing Linear Inequalities
115	Capacity, Volume and Mass in the Metric System
116	Factoring Algebraic Expressions
117	Slope-Intercept Form of Linear Equations
118	Copying Angles and Triangles
119	Division by Zero
120	Graphing Nonlinear Equations
Investigation 12	Proving the Pythagorean Theorem