GEOMETRY - included in Saxon Advanced Math

Lesson 1 – Geometry Review
Lesson 2 – More on Area – Cylinder and Prisms – Cones and Pyramids – Spheres
Lesson 3 – Pythagorean Theorem – Triangle Inequalities (1) – Similar Polygons – Similar Triangles
Lesson 4 - Construction
Lesson 5 – Areas of Similar Geometric Figures – Diagonals of Rectangular Solids
Lesson 7 - Inductive and Deductive reasoning – Logic – The Contrapositive – Converse and Inverse
Lesson 8 – Statements of Similarity – Proportional Segments – Angle Bisectors and Side Ratios
Lesson 9 – Congruent Figures – Proof Outlines
Lesson 10 – Equation of a Line
Lesson 11 – Circles – Properties of Circles
Lesson 12 – Angles and Diagonals in Polygons – Proof of the Chord-Tangent Theorem
Lesson 13 – Intersecting Secants – Intersecting Secants and Tangents – Products of Chord Segments – Products of Secant and Tangent Segments
Lesson 15 – Assumptions - Proofs
Lesson 17 – Proofs of the Pythagorean Theorem – Proofs of Similarity
Lesson 20 – Two Special Triangles
Lesson 31 – Symmetry – Reflections - Translations
Lesson 33 – Quadrilaterals – Properties of Parallelograms – Types of Parallelograms – Conditions for Parallelograms - Trapezoids
Lesson 34 – Linear Regression
Lesson 35 – The Distance Formula
Lesson 36 – Angles Greater Than 360°
Lesson 37 – The Line as a Locus – The Midpoint Formula
Lesson 42 – Conic Sections - Circles
Lesson 48 – Perpendicular Bisectors
Lesson 58 – Distance from a Point to a Line
Lesson 63 – Circles and Completing the Square
Lesson 68 – Locus Definition of a Parabola – Translated Parabolas – Applications - Derivation
Lesson 71 – The Ellipse (1)
Lesson 72 – One Side Plus Two Other Parts
Lesson 73 – Regular Polygons
Lesson 78 – The Hyperbola
Lesson 89 – The Ellipse (2)
Lesson 99 – The Arithmetic and Geometric Means
Lesson 106 – Translations of Conic Sections – Equations of the Ellipse – Equations of the Hyperbola
Lesson 123 – The General Conic Equation
Lesson 125 – Using the Graphing Calculator to Graph

GEOMETRY - included in Saxon Algebra 2 (2nd and 3rd Editions)

Lesson A – Geometry review – Angles
Lesson B – Perimeter – Area – Volume - Surface Area – Sectors of circles
Lesson 1 – Polygons – Triangles – Transversals – Proportional segments
Lesson 2 – Circle relationships
Lesson 7 – Equations from geometry
Lesson 8 – Graphing linear equations – Intercept-slope method
Lesson 10 – Pythagorean Theorem
Lesson 11 – Inscribed angles
Lesson 12 – Equation of a line
Lesson 13 – Area of an isosceles triangle

Lesson 14 – Equation of a line through two points – Equation of a line with a given slope
Lesson 17 – Angle relationships
Lesson 18 - Similar triangles
Lesson 19 – AA means AAA
Lesson 20 – Line parallel to a given line
Lesson 22 – Uniform motion problems – equal distances - Similar triangles and proportions
Lesson 23 – Graphical solutions
Lesson 24 – Overlapping triangles
Lesson 25 – Parallel lines
Lesson 26 – Overlapping right triangles
Lesson 29 – Uniform motion problems:
Lesson 30 – Deductive reasoning – Euclid – Vertical angles are equal – Corresponding interior and exterior angles - 180° in a triangle
Lesson 31 – Perpendicular lines – Remote interior angles
Lesson 32 – Congruency – Congruent triangles
Lesson 34 – Uniform motion problems:
Lesson 35 – Angles in polygons – Inscribed quadrilaterals
Lesson 37 – Parallelograms
Lesson 39 – Parallelogram proof – Rhombus
Lesson 49 – Linear intercepts – Transversals
Lesson 54 – Similar triangles
Lesson 56 – Angles in circles – Proofs
Lesson 66 – 30-60-90 triangles
Lesson 72 – Lines from experimental data
Lesson 74 – Uniform motion with both distances given
Lesson 79 – Metric volume - 45-45-90 triangles
Lesson 87 – Slope formula
Lesson 88 – The distance formula
Lesson 100 – Graphs of parabolas
Lesson 123 – Locus – Basic construction
Lesson 124 – Conditions of congruence – Proofs of congruence – Isosceles triangles
Lesson 125 – Distance defined – Equidistance – Circle proofs
Lesson 126 – Rectangles – Squares – Isosceles trapezoids – Chords and arcs
Lesson 127 - Lines and planes in space
Lesson 128 – Circumscribed and inscribes – Inscribed triangles – Inscribed circles – Proof of the Pythagorean Theorem – Inscribed angles

GEOMETRY - included in Saxon Algebra 1 (3rd Edition)

Lesson 1 – Lines and Segments
Lesson 2 – Angles – Polygons – Triangles – Quadrilaterals
Lesson 3 – Perimeter – Circumference
Lesson 8 – Area
Lesson 10 – Conversions of Area
Lesson 15 – Surface Area
Lesson 20 – Volume
Lesson 51 – Graphs of Linear Equations – Graphs of Vertical and Horizontal Lines
Lesson 52 – Conversions of Volume
Lesson 56 – Rearranging Before Graphing
Lesson 60 – Geometric Solids – Prisms and Cylinders
Lesson 72 – Pyramids and Cones
Lesson 75 – Writing the Equation of a Line – Slope-Intercept Method of Graphing

Lesson 81 – Graphical Solutions of Equations – Inconsistent Equations –Dependent Equations
Lesson 91 – Spheres
Lesson 92 – Uniform Motion Problems About Equal Distances
Lesson 94 - Uniform Motion Problems of the Form
Lesson 97 – Angles and Triangles – Pythagorean Theorem – Pythagorean Triples
Lesson 98 – Distance Between Two Points – Slope Formula
Lesson 99 – Uniform Motion – Unequal Distances
Lesson 106 – Linear Equations – Equation of a Line Through Two Points
Lesson 107 – Line Parallel to a Given Line – Equation of a Line with a Given Slope
Lesson 110 – Vertical Shifts – Horizontal Shifts – Reflection About the x Axis – Combination of Shifts and Reflections

GEOMETRY - included in Saxon Algebra 1 (2nd Edition)

Lesson A – Lines and segments
Lesson B – Geometry review – Perimeter – Area
Lesson C – Geometric shapes – Volume – Degree measure
Lesson 2 – Surface area
Lesson 8 – Conversions of area and volume
Lesson 28 – Volume conversions
Lesson 54 – Graphs of linear equations
Lesson 55 – Vertical and horizontal lines
Lesson 61 – More on area and volume
Lesson 84 – Graphical solutions
Lesson 85 – Writing the equation of a line
Lesson 93 – Slope-intercept method of graphing
Lesson 96 – Uniform motion problems of the form
Lesson 101 – Pythagorean Theorem
Lesson 102 – Distance between two points
Lesson 104 – Uniform motion – unequal distances
Lesson 112 – Equation of a line through two points
Lesson 115 – Line parallel to a given line
Lesson 116 – Equation of a line with a given slope
Lesson 119 – Consistent, inconsistent, and dependent equations