

Informal Geometry Scope and Sequence

Section 1: Introduction to Geometry – Points, Lines, and Planes

Topic 1: Basics of Geometry – Part 1

Topic 2: Basics of Geometry – Part 2

Topic 3: Midpoint and Distance in the Coordinate Plane – Part 1

Topic 4: Midpoint and Distance in the Coordinate Plane – Part 2

Topic 5: Partitioning a Line Segment – Part 1

Topic 6: Partitioning a Line Segment – Part 2

Topic 7: Parallel and Perpendicular Lines – Part 1

Topic 8: Parallel and Perpendicular Lines – Part 2

Section 2: Introduction to Geometry – Basic Transformations

Topic 1: Introduction to Transformations

Topic 2: Examining and Using Translations

Topic 3: Examining and Using Dilations – Part 1

Topic 4: Examining and Using Dilations – Part 2

Topic 5: Examining and Using Rotations

Topic 6: Examining and Using Reflections

Section 3: Angles

Topic 1: Introduction to Angles – Part 1

Topic 2: Introduction to Angles – Part 2

Topic 3: Special Types of Angle Pairs Formed by Transversals and Non-Parallel Lines

Topic 4: Special Types of Angle Pairs Formed by Transversals and Parallel Lines – Part 1

Topic 5: Special Types of Angle Pairs Formed by Transversals and Parallel Lines – Part 2

Topic 6: Perpendicular Transversals

Topic 7: Angle-Preserving Transformations

Section 4: Introduction to Polygons – Part 1

Topic 1: Introduction to Polygons – Part 1

Topic 2: Introduction to Polygons – Part 2

Topic 3: Angles of Polygons

Topic 4: Translation of Polygons

Topic 5: Reflections of Polygons

Topic 6: Rotations of Polygons – Part 1

Topic 7: Rotations of Polygons – Part 2

Topic 8: Dilation of Polygons

Section 5: Introduction to Polygons – Part 2

Topic 1: Compositions of Transformations of Polygons – Part 1

Topic 2: Compositions of Transformations of Polygons – Part 2

Topic 3: Symmetries of Regular Polygons

Topic 4: Congruence and Similarity of Polygons – Part 1

Topic 5: Congruence and Similarity of Polygons – Part 2

Section 6: Triangles

Topic 1: Introduction to Triangles – Part 1

Topic 2: Area and Perimeter on the Coordinate Plane – Part 1

Topic 3: Area and Perimeter on the Coordinate Plane – Part 2

Topic 4: Triangle Congruence – SSS and SAS – Part 1

Topic 5: Triangle Congruence – SSS and SAS – Part 2

Topic 6: Triangle Congruence – ASA and AAS – Part 1

Topic 7: Triangle Congruence – ASA and AAS – Part 2

Topic 8: Using Triangle Congruency to Find Missing Variables

Topic 9: Triangle Similarity – Part 1

Topic 10: Triangle Similarity – Part 2

Section 7: Quadrilaterals – Part 1

Topic 1: Introduction to Quadrilaterals – Part 1

Topic 2: Introduction to Quadrilaterals – Part 2

Topic 3: Introduction to Quadrilaterals – Part 3

Topic 4: Parallelograms – Part 1

Topic 5: Parallelograms – Part 2

Topic 6: Rectangles and Squares – Part 1

Topic 7: Rectangles and Squares – Part 2

Section 8: Quadrilaterals – Part 2

Topic 1: Rhombi

Topic 2: Kites

Topic 3: Trapezoids

Topic 4: Midsegment of Trapezoids

Topic 5: Quadrilaterals in Coordinate Geometry – Part 1

Topic 6: Quadrilaterals in Coordinate Geometry – Part 2

Section 9: Properties of Other Polygons

Topic 1: Introduction to Other Polygons – Part 1

Topic 2: Introduction to Other Polygons – Part 2

Topic 3: Angles of Other Polygons - Part 1

Topic 4: Angles of Other Polygons – Part 2

Topic 5: Segments in Regular Polygons

Topic 6: Area of Polygons

Topic 7: Coordinate Geometry – Part 1

Topic 8: Coordinate Geometry – Part 2

Section 10: Circles – Part 1

Topic 1: Circumference of a Circle

Topic 2: Arcs and Circumference of a Circle

Topic 3: Area of a Circle

Topic 4: Sectors of a Circle

Topic 5: Circles in the Coordinate Plane: Standard Form

Topic 6: Circles in the Coordinate Plane: General Form

Topic 7: Circle Transformations

Topic 8: Radians and Degrees

Section 11: Circles – Part 2

Topic 1: Tangent Lines, Secants and Chords – Part 1

Topic 2: Tangent Lines, Secants and Chords – Part 2

Topic 3: Circumscribed Angles and Beyond – Part 1

Topic 4: Circumscribed Angles and Beyond – Part 2

Section 12: Three-Dimensional Geometry

Topic 1: Geometry Nets and Three-Dimensional Figures

Topic 2: Volume of Prisms and Cylinders

Topic 3: Surface Area of Prisms and Cylinders

Topic 4: Volume of Pyramids and Cones

Topic 5: Surface Area of Pyramids and Cones

Topic 6: Spheres

Topic 7: Areas in Real-World Contexts

Topic 8: Volume in Real-World Contexts

Topic 9: Density

Topic 10: Similar Shapes