Geometry (Regents)-Illustrative Mathematics

Unit 1 – CONSTRUCTIONS and RIGID TRANSFORMATIONS

1.1 Build It
1.2 Construction Patterns
1.3 Construction Techniques
1.4 Construction Techniques 2
1.5 Construction Techniques 3
1.6 Construction Techniques 4
1.7 Construction Techniques 5
1.10 Rigid Transformations
1.12 Defining Translations
1.13 Incorporating Rotations
1.15 Symmetry
1.17 Working with Rigid Transformations
1.19 Evidence, Angles and Proof
1.20 Transformations, Transversals and Proof
1.21 One Hundred and Eighty
Assessment

Unit 2 - CONGRUENCE

2.1 Congruent Parts (Part 1)
2.2 Congruent Parts (Part 2)
2.3 Congruent Triangles (Part 1)
2.4 Congruent Triangles (Part 2)
2.5 Points, Segments and Zigzags
2.6 Side-Angle-Side Triangle Congruence
2.7 Angle-Side-Angle Triangle Congruence
2.8 Perpendicular Bisector Theorem
2.9 Side-Side-Side Triangle Congruence
2.10 Practicing Proofs
2.12 Proofs about Quadrilaterals
2.13 Proofs about Parallelograms
2.14 Bisect It
Assessment

Unit 3 - SIMILARITY

3.1 Scale Drawings
3.3 Measuring Dilations
3.4 Dilating Lines and Angles
3.5 Splitting Triangle Sides with dilations
3.6 Connecting Similarity and Transformations
3.7 Reasoning about Similarity with Transformations
3.8 Are They All Similar?
3.9 Conditions for Triangle Similarity
3.11 Splitting Triangle Sides and Dilation
3.13 Using the Pythagorean Theorem and Similarity
3.14 Proving the Pythagorean Theorem
Assessment

Unit 4 – RIGHT TRIANGLE TRIGONOMETRY

4.1 Angles and Steepness
4.4 Ratios in Right Triangles
4.5 Working with Ratios in Right Triangles
4.6 Working with Trigonometric Ratios
4.7 Applying Ratios in Right Triangles
4.8 Sine and Cosine in the Same Right Triangle
4.9 Using Trigonometric Ratios to Find Angles
4.10 Solving Problems with Trigonometry
4.11 Using Trigonometry to find Area of a Triangle
Assessment

Unit 5 – SOLID GEOMETRY

5.1 Solids of Rotation
5.2 Slicing Solids
5.3 Creating Cross Sections by Dilating
5.4 Scaling and Area
5.5 Scaling and Unscaling
5.6 Scaling Solids
5.7 The Root of the Problem
5.8 Speaking of Scaling
5.9 Cylinder Volumes
5.10 Cross Sections and Volume
5.11 Prism Practice
5.12 Prisms and Pyramids
5.13 Building a Volume Formulas for a Pyramid
5.14 Working with Pyramids
Assessment

Unit 6 – COORDINATE GEOMETRY

6.1 Rigid Transformations in the Plane
6.2 Transformations as Functions
6.3 Types of Transformations
6.4 Distances and Circles
6.5 Squares and Circles
6.6 Completing the Square
6.9 Equations of Lines
6.10 Parallel Lines in the Plane
6.11 Perpendicular Lines in the Plane
6.12 It's All on the Lines
6.14 Coordinate Proof
6.15 Weighted Averages
6.16 Weighted Averages in a Triangle
Assessment

Unit 7 - CIRCLES

7.1 Lines, Angles, and Curves
7.2 Inscribed Angles
7.3 Tangent Lines
7.4 Quadrilaterals in Circles
7.5 Triangles in Circles
7.6 A Special Point
7.7 Circles in Triangles
7.8 Arcs and Sectors
7.9 Part to Whole
7.14 Putting it All Together
Assessment

Regents Review

Please be aware the Regents Exam is:

1st Semester: Wednesday, January 22nd (am)

2nd Semester: Wednesday, June 11th (am)