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Student _____

Record Keeping: *Geometry*

	Date	Test Score	Proficiency
Pretest (Unit Test I)			

		LESSON PRACTICE		TEACH BACK	SYSTEMATIC REVIEW			H	Lesson Test	Test Date
		A	B		C	D	E			
1	Points, Lines, Rays, and Line Segments									
2	Planes and Sets									
3	Angles									
4	Types of Angles									
5	Parallel and Perpendicular Lines									
6	Supplementary and Complementary Angles									
7	Transversals									
8	Perimeter; Interior Angles									
9	Area									
10	Constructing and Identifying Triangles									

	Date	Test Score	Proficiency
Posttest (Unit Test I)			

LESSON OBJECTIVES

Lesson 1 Points, Lines, Rays, and Line Segments

- GE.1.a Describe a point, line, ray, line segment, and plane
- GE.1.b Identify points, lines, rays, segments, and planes
- GE.1.c Identify symbols associated with points, lines, rays, segments, and planes
- GE.1.d Define the terms equal, similar, congruent, collinear, endpoint, and geometry
- GE.1.e Draw and label a line segment, ray, line, and plane

Lesson 2 Planes and Sets

- GE.2.a Define the terms coplanar, plane geometry, and solid geometry
- GE.2.b Define a set, intersection, union, empty or null set, proper subset, improper subset, element, complement, n(A), and universal set
- GE.2.c Identify the symbols for set, intersection, union, empty or null set, proper subset, improper subset, element, not an element, complement, n(A), and universal set

Lesson 3 Angles

- GE.3.a Define angle, protractor, degree, and vertex
- GE.3.b Measure given angles with a protractor
- GE.3.c Draw angles of a given measure
- GE.3.d Identify angles using Greek letters, 3-letter names, and 1-letter names
- GE.3.e Differentiate between ∠ and m∠

Lesson 4 Types of Angles

- GE.4.a Classify angles as acute, obtuse, straight, or reflex
- GE.4.b Identify and explain the meaning of the right angle indicator

Lesson 5 Parallel and Perpendicular Lines

- GE.5.a Define the terms parallel, perpendicular, bisector, midpoint, and bisect
- GE.5.b Identify the symbols for parallel and perpendicular
- GE.5.c Construct the perpendicular bisector of a line segment
- GE.5.d Construct the bisector of an angle

Proficiency Guide: A (Advanced) 90–100% **P** (Proficient) 80–89% **NP** (Nearing Proficiency) 70–79% **BS** (Beginning Steps) Below 70%

Lesson 6	**Supplementary and Complementary Angles**
GE.6.a	Identify and write Greek letters alpha, beta, gamma, and delta
GE.6.b	Describe and identify adjacent angles, vertical angles, supplementary angles, and complementary angles
Lesson 7	**Transversals**
GE.7.a	Describe transversal, interior angles, exterior angles, corresponding angles, alternate angles, alternate exterior angles, and alternate interior angles
GE.7.b	Identify congruent pairs of angles formed by a set of parallel lines and a transversal
GE.7.c	Describe a postulate and converse
Lesson 8	**Perimeter; Interior Angles**
GE.8.a	Describe perimeter, quadrilateral, rectangle, parallelogram, rhombus, trapezoid, square, and interior angle
GE.8.b	State the number of degrees in the interior angles of a triangle and a quadrilateral
Lesson 9	**Area**
GE.9.a	Define the terms area, height, and base
GE.9.b	Find the area of a rectangle, parallelogram, triangle, square, and trapezoid
Lesson 10	**Constructing and Identifying Triangles**
GE.10.a	Define the terms equilateral, equiangular, isosceles, and scalene
GE.10.b	Define the terms obtuse, right, and acute as they relate to triangles
GE.10.c	Explain why the sum of the lengths of the shorter two sides of a triangle must be greater than the length of the longest side of the triangle
GE.10.d	Demonstrate the use of hash marks to show congruent line segments or congruent angles

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Record Keeping: *Geometry*

	Date	Test Score	Proficiency
Pretest (Unit Test II)			

		LESSON PRACTICE		TEACH BACK	SYSTEMATIC REVIEW			H	Lesson Test	Test Date
		A	B		C	D	E			
11	Regular Polygons									
12	Geometry of a Circle, Sphere, and Ellipse									
13	Area of a Circle and an Ellipse									
14	Volume: Rectangular Solid and Cylinder									
15	Volume: Pyramid, Cone, Prism, and Sphere									
16	Surface Area of Solids									
17	Radicals									
18	Pythagorean Theorem									
19	More on Radicals									

	Date	Test Score	Proficiency
Posttest (Unit Test II)			

LESSON OBJECTIVES

Lesson 11 Regular Polygons

GE.11.a Define the terms polygon, concave polygon, convex polygon, regular polygon, pentagon, hexagon, octagon, decagon, dodecagon, interior angle, and exterior angle

GE.11.b Calculate the sum of the measures of the interior angles of a polygon

GE.11.c State the measure of one interior angle of a regular polygon

GE.11.d State that the sum of the measures of the exterior angles of a polygon is 360 degrees

Lesson 12 Geometry of a Circle, Sphere, and Ellipse

GE.12.a Define the terms circle, center, chord, radius, diameter, tangent, secant, sector, arc, sphere, ellipse, central angle, minor arc, major arc, intercepted arc, and inscribed angle

GE.12.b State the relationship between the measures of a central and an inscribed angle in a circle

Lesson 13 Area of a Circle and an Ellipse

GE.13.a State the formula for the area of a circle

GE.13.b Find the area of a circle

Lesson 14 Volume: Rectangular Solid and Cylinder

GE.14.a Define the terms face, edge, and vertex as they relate to solid shapes

GE.14.b Define the terms cube and cylinder

GE.14.c Find the volume of a rectangular solid

GE.14.d Find the volume of a cylinder

Lesson 15 Volume: Pyramid, Cone, Prism, and Sphere

GE.15.a Define the terms altitude and slant height

GE.15.b Define the terms pyramid, cone, triangular prism, and sphere

GE.15.c Find the volume of a pyramid

GE.15.d Find the volume of a cone

GE.15.e Find the volume of a triangular prism

GE.15.f Find the volume of a sphere

Lesson 16 Surface Area of Solids

GE.16.a Find the surface area of any rectangular solid

GE.16.b Find the surface area of a pyramid

GE.16.c Find the surface area of a cylinder

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Lesson 17	**Radicals**
GE.17.a	Define the term radical
GE.17.b	Perform addition and subtraction operations with terms containing radicals
GE.17.c	Perform multiplication and division operations with terms containing radicals
GE.17.d	Simplify radical expressions by removing all square factors from under the radical sign
GE.17.e	Find decimal approximations of irrational roots using a calculator
Lesson 18	**Pythagorean Theorem**
GE.18.a	Define the terms leg and hypotenuse in reference to a right triangle
GE.18.b	State the Pythagorean theorem
GE.18.c	Use the Pythagorean theorem to find the missing side of a right triangle when two sides are given
GE.18.d	State the converse of the Pythagorean theorem
GE.18.e	Determine if a triangle is right when given the lengths of the three sides
Lesson 19	**More on Radicals**
GE.19.a	Rationalize the denominator of a fraction (one-term denominator)

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Record Keeping: *Geometry*

	Date	Test Score	Proficiency
Pretest (Unit Test III)			

		LESSON PRACTICE		TEACH BACK	SYSTEMATIC REVIEW			H	Lesson Test	Test Date
		A	B		C	D	E			
20	Special Triangles: 45°-45°-90°									
21	Special Triangles: 30°-60°-90°									
22	Axioms, Postulates, and Theorems									
23	Corresponding Parts of Triangles									
24	Proving Triangles Congruent: SSS and SAS									
25	Proving Triangles Congruent: ASA and AAS									
26	Proving Right Triangles Congruent									
27	Proving Triangles Similar with AA									
28	Transformational Geometry									
29	Trigonometric Functions									
30	Reciprocal Trigonometric Functions									

	Date	Test Score	Proficiency
Posttest (Unit Test III)			

LESSON OBJECTIVES

Lesson 20 Special Triangles: 45°-45°-90°

- GE.20.a State the proportional relationship between one leg and the hypotenuse on a 45°-45°-90° triangle
- GE.20.b State the proportional relationship between one leg of a 45°-45°-90° triangle and the other leg
- GE.20.c State the lengths of the remaining sides of a 45°-45°-90° triangle when given the length of one side
- GE.20.d Determine whether a triangle has angle measures of 45°-45°-90° based on the side lengths

Lesson 21 Special Triangles: 30°-60°-90°

- GE.21.a State the proportional relationships among the three sides of a 30°-60°-90° triangle
- GE.21.b Find the length of any side of a 30°-60°-90° triangle given any other side
- GE.21.c Determine whether a triangle has angle measures of 30°-60°-90° based on the side lengths

Lesson 22 Axioms, Postulates, and Theorems

- GE.22.a State the Property of Symmetry: if A = B, then B = A
- GE.22.b State the Reflexive Property: A = A
- GE.22.c State the Transitive Property: if A = B and B = C, then A = C
- GE.22.d Define the terms axiom, postulate, and theorem

Proficiency Guide: A (Advanced) 90–100% **P** (Proficient) 80–89% **NP** (Nearing Proficiency) 70–79% **BS** (Beginning Steps) Below 70%

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Record Keeping: *Geometry*

Lesson 23	**Corresponding Parts of Triangles**
GE.23.a	Identify corresponding parts of a pair of congruent or similar triangles
GE.23.b	Define the term remote interior angle
Lesson 24	**Proving Triangles Congruent: SSS and SAS**
GE.24.a	Prove a pair of triangles congruent using SSS
GE.24.b	Prove a pair of triangles congruent using SAS
Lesson 25	**Proving Triangles Congruent: ASA and AAS**
GE.25.a	Prove a pair of triangles congruent using ASA
GE.25.b	Prove a pair of triangles congruent using AAS
GE.25.c	Describe CPCTRC
GE.25.d	Identify corresponding parts of congruent triangles
GE.25.e	State the amplified parallelogram theorem
GE.25.f	Apply the amplified parallelogram theorem
Lesson 26	**Proving Right Triangles Congruent**
GE.26.a	Prove two right triangles congruent by HL
GE.26.b	Prove two right triangles congruent by HA
GE.26.c	Prove two right triangles congruent by LA
GE.26.d	Prove two right triangles congruent by LL
Lesson 27	**Proving Triangles Similar with AA**
GE.27.a	Define the term similar
GE.27.b	Define the AA postulate
GE.27.c	Prove two triangles similar using the AA postulate
GE.27.d	State the ratio of corresponding sides in pairs of similar polygons
GE.27.e	Find the lengths of missing sides in pairs of simliar polygons when the ratio of corresponding sides is known
Lesson 28	**Transformational Geometry**
GE.28.a	Translate a graph horizontally and/or vertically using integer movements
GE.28.b	Reflect a graph across the *x*- or *y*-axis
GE.28.c	Reflect a graph across horizontal and vertical lines that are not axes
GE.28.d	Rotate a graph about the origin
GE.28.e	Rotate a graph about a point other than the origin
GE.28.f	Dilate a graph about its center
GE.28.g	Combine two or more transformations of one graph
GE.28.h	Describe a transformation, given a before and an after graph
Lesson 29	**Trigonometric Functions**
GE.29.a	Define the terms adjacent and opposite
GE.29.b	Define the trigonometric ratios sine, cosine, and tangent
GE.29.c	Give sine, cosine, and tangents of angles in triangles with given side lengths
Lesson 30	**Reciprocal Trigonometric Functions**
GE.30.a	Define the trigonometric ratios secant, cosecant, and cotangent
GE.30.b	State the secant, cosecant, and tangent in triangles with given side lengths
GE.30.c	State the Pythagorean identity