Geometry (H)
Undefined and Defined Terms

1. Point, line and plane are three undefined terms used in geometry.

2. Inductive reasoning: Reaching a conclusion based on a pattern of specific examples.

3. Conjecture: A conclusion reached by using inductive reasoning.

4. Collinear points: Points that lie on the same line.

5. Coplanar points and lines: Points and lines in the same plane.

6. Space: The set of all points.

7. Postulate: An accepted statement of fact.

8. Segment: A part of a line consisting of two endpoints and all the points between them.

9. Ray: A part of a line consisting of one endpoint and all the points on the line on one side of the endpoint.

10. Opposite rays: Two collinear rays with the same endpoint.

11. Skew lines: Non-parallel, non-intersecting lines.

12. Congruent segments: Two segments with the same length.

13. Angle: A figure formed by two rays (called sides of the angle) with the same endpoint (called the vertex of the angle).

14. Acute angle: An angle whose measure is less than 90°.

15. Right angle: An angle whose measure is 90°.

16. Obtuse angle: An angle whose measure is greater than 90°.

17. Straight angle: An angle whose measure is 180°.

18. Congruent angles: Angles with the same measure.

19. Midpoint of a segment: A point that divides a segment into two congruent segments.

20. Perpendicular lines: Two lines that intersect to form right angles.

21. Perpendicular bisector: A line, segment, or ray that is perpendicular to a segment at its midpoint.

22. Construction: The process of making a geometric figure with a straightedge and compass.

23. Deductive reasoning: The process of reasoning logically from given facts to a conclusion.

24. Vertical angles: Two angles whose sides are opposite rays.

25. Adjacent angles: Two coplanar angles with a common side, a common vertex, and no common interior points.

26. Complementary angles: Two angles, the sum of whose measures is 90.

27. Supplementary angles: Two angles, the sum of whose measures is 180.

28. Theorem: A conjecture that is proven.
29. Proof: A convincing argument that uses deductive reasoning.

30. Exterior angle of a triangle: An angle formed by a side and an extension of a side.

31. Remote interior angles: The two non-adjacent angles to an exterior angle of a triangle.

32. Corollary: A statement that follows directly from a theorem.

33. Equilateral triangle: A triangle with all sides congruent.

34. Isosceles triangle: A triangle with at least two sides congruent.

35. Scalene triangle: A triangle with no sides congruent.

36. Equiangular triangle: A triangle with all angles congruent.

37. Acute triangle: A triangle with all acute angles.

38. Right triangle: A triangle with one right angle.

39. Obtuse triangle: A triangle with one obtuse angle.

40. Polygon: A closed plane figure with at least three sides.

41. Convex polygon: A polygon where no diagonal contains point outside the polygon.

43. Concave polygon: A polygon where at least one diagonal contains points outside the polygon.

44. Equilateral polygon: A polygon with all sides congruent.

45. Equiangular polygon: A polygon with all angles congruent.

46. Regular polygon: A polygon that is equilateral and equiangular.

47. Parallelogram: A quadrilateral with both pairs of opposite sides parallel.

48. Rhombus: A parallelogram with four congruent sides.

49. Rectangle: A parallelogram with four right angles.

50. Square: A parallelogram with four congruent sides and four right angles.

51. Trapezoid: A quadrilateral with exactly one pair of oppsoite sides parallel.

52. Isosceles trapezoid: A trapezoid whose nonparallel sides are congruent.

53. Circle: A set of coplanar points equidistant from a given point.

54. Radius of a circle: A segment that has one endpoint at the center and the other on the circle.

55. Diameter: A segment that contains the center of a circle and has both endpoints on the circle.

56. Semicircle: A half circle

57. Minor arc: A portion of the circumference of a circle that is shorter than a semicircle.

58. Major arc: A portion of the circumference of a circle that is longer than a semicircle.

59. Adjacent arcs: Two arcs in the same circle that have exactly one point in common.

60. Congruent circles: Circles with congruent radii.

61. Congruent polygons: Polygons with congruent correspnding parts.

62. Similar polygons: Polygons with congruent corresponding angles and proportional corresponding sides.

63. Similarity ratio: The ratio of the lengths of corresponding sides of two similar polygons.

64. Conditional: A statement in if-then form.

65. Hypothesis: The part following *if* in a conditional.

66. Conclusion: The part following the *then* in a conditional.

67. Truth value: The determination of whether a conditional is true or false.

68. Converse: A statement where the hypothesis and conclusion are interchanged.

69. Biconditional: A combined statement where both the original statement and its converse are true.

70. Inverse: A statement where both the hypothesis and conclusion are negated.

71. Contrapositive: A statement where the hypothesis and conclusion have been interchanged and negated.

72. Legs of an isosceles triangle: The congruent sides.

73. Base of an isosceles triangle: The third side of an isosceles triangle.

74. Vertex angle of an isosceles triangle: The angle formed by the congruent sides.

75. Base angles of am isosceles triangle: The two angles other than the vertex

angles.

76. Two-column proof: A proof consisting of a Given, a Prove, a Diagram, and Statements and Reasons.

77. Midsegment of a triangle: A segment connecting the midpoints of two sides of a triangle.

78. Locus: A set of points that meets a stated condition.

79. Distance from a point to a line: The length of the perpendicular segment from the point to the line.

80. Concurrent lines: Two or more lines that intersect in a single point.

81. Median of a triangle: A segment whose endpoints are a vertex and the midpoint of the side opposite the vertex.

82. Altitude of a triangle: The perpendicular segment from a vertex to the line containing the side opposite the vertex.

83. Centroid: The point where the medians of a triangle are concurrent.

84. Orthocenter: The point where the lines containing the altitudes of a triangle are concurrent.

85. Circumcenter: The point where the perpenedicular bisectors of the sides of a triangle are concurrent.

86. Euler's line: The line that contains the centroid, the orthocenter, and the circumcenter of a triangle.

87. Hypotenuse: The side of a right triangle opposite the right angle.
88. Legs of a right triangle: The two sides other than the hypotenuse.

89. Pythagorean triples: Three integers that satisfy the conclusion of the Pythagorean Theorem.

90. Bases of a trapezoid: The parallel sides of a trapezoid.

91. Legs of a trapezoid: The nonparallel sides of a trapezoid.

92. Central angle of a circle: An angle whose vertex is at the center of the circle.

93. Inscribed angle: An angle whose vertex is on the circle and whose sides contain chords.

94. Chord: A segment whose endpoints lie on a circle.

95. Tangent to a circle: A line in the plane of a circle that intersects the circle in exactly one point.

96. Tangent circles: Coplanar circles that are tangent to the same line at the same point.

97. Congruent circles: Circles with congruent radii.

98. Concentric circles: Circles that lie in the same plane and have the same center.

99. Measure of a minor arc: The measure of the central angle that intercepts the arc.

100. Congruent arcs: Arcs in the same circle or in congruent circles that have the same measure.