**Geometry**

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| **Reasoning, Lines, and Transformations** | | | | |
| Inductive reasoning | Deductive reasoning | Proof | Conclusions | Definitions |
| Postulates | Theorems | Law of syllogism | Law of contrapositive | Law of detachment |
| Counterexample | Premise/hypothesis | Conclusion | Direct proof | Parallel lines |
| Transversal | Intersect | Corresponding angles | Alternate interior angles | Alternate exterior angles |
| Same-side (consecutive) interior angles | Supplementary | Same-side (consecutive) exterior angles | Deductive proof | Symmetry |
| Transformation | Distance formula | Pythagorean Theorem | Slope | Perpendicular lines |
| Undefined slope | Preimage | Isomorphic transformation | Rotation | Center of rotation |
| Reflection | Line of reflection | Equidistant | Horizontal/vertical lines | Clockwise rotation |
| Counterclockwise rotation | Midpoint | Endpoint | Line segment | Construct |
| Justify | Perpendicular bisector | Bisector | Equilateral triangle | Regular polygon |

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| **Triangle** | | | | |
| Triangle | Congruence | Deductive reasoning | Inductive reasoning | Similarity |
| Corresponding parts | Congruent triangles | Intercepts | x-intercept | Side-Angle-Side |
| Side-Side-Side | Angle-Side-Angle | Angle-Side-Angle | Hypotenuse-leg | Bisector |
| Similarity | Dilation | Corresponding sides | Corresponding angles | Altitude |
| Angle-Angle | Distance formula | Slope formula | Pythagorean Theorem | 300-600-900 triangle |
| 450-450-900 triangle | Trigonometric ratios | Sine ϴ | Cosine ϴ | Tangent ϴ |

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| **Polygons and Circles** | | | | |
| Quadrilateral | Diagonal | Distance formula | Slope formula | Midpoint formula |
| Parallel lines | Transversal | Intersecting | Rhombus | Rectangle |
| Square | Trapezoid | Perpendicular bisector | Inscribed | Convex polygon |
| Concave polygon | Interior angles | Exterior angles | Corresponding interior angles | Linear pair |
| Regular/nonregular polygons | Tessellation | Circle | Similar | Chord |
| Secant | Arc | Inscribes quadrilaterals | Supplementary | Central angle |
| Inscribes equilateral triangle | Tangent | Inscribed angle | Sector | Area of a sector |
| Equidistant | Equation of a circle | Endpoints | Diameter | Radius |
| Midpoint | Center | Coordinates |  |  |

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| **Three-Dimensional Figures** | | | | |
| Surface area | Volume | Cylinder | Solid figure | Base |
| Right circular cylinder | Face | Vertex (apex) | Right circular cone | Prism |
| Polyhedron | Right prism | Regular hexagon | Rectangular prism | Triangular prism |
| Pyramid | Regular pyramid | Right regular prism | Regular polygon | Sphere |
| Hemisphere | Composite three-dimensional figures | Lateral area | Parallel bases | Unit cubes |
| Constant ratio | Scale factor | Similar figure | Proportional reasoning | Perimeter |
| Area |  |  |  |  |