Chapter 1

Collinear 共面 Coplanar 共面 Postulate 假定 Quadrilateral 四边形 Adjacent 邻角 Concave 凹 Convex 凸

Midpoint formula: $(X_1+X_2/2, Y_1+Y_2/2)$　　　　　　　　Distance formula:

Definition of congruent angles: If two angles have the same measure, they are congruent.

*表示一个面用三个共面点

Chapter 2

Conjecture 推测 Inductive reasoning 举例证明（主观） Deductive reasoning 事实证明（客观）

Hypothesis 假设 Conclusion 结论 Bisector 平分点（线、面）

Conditional statement: If P, then Q. Converse statement: If Q, then P.

Inverse statement: If not P, Then not Q. Contrapositive statement: If not Q, then not P.

Biconditional statement: If conditional and converse are both true.   -P if and only if Q-

Two-Point postulate, Line-Point post., Line-Intersection post., Three-Point post., Plane-Point post., Plane-Line post., Plane-Intersection post..

Addition property, Subtraction prop., Multiplication prop., Division prop., Substitution prop., Distributive prop., Reflexive prop., Symmetric prop., Transitive prop..

Chapter 3

Corresponding 同位 Alternate Interior 内错 Alternate Exterior 外错 Consecutive Interior 同旁内

Corr. angle thm., Alt. Int. angle thm., Alt. Ext. angle thm., Cons. Int. angle thm..

Corr. angle conv., Alt. Int. angle conv., Alt. Ext. angle conv., Cons. Int. angle conv..

Transitive prop. Of parallel lines: If A parallel to B, B parallel to C, then A parallel to C.

Partitioning a Directed Line Segment: x/y from A-B, find the slope a/b, $(a \cdot x/y)/(b \cdot x/y)$, A(k, l)---P(k+run, l+rise)

Chapter 4

Reflection: x-axis (x, y)—(x, -y), y-axis (x, y)—(-x, y), y=x (x, y)—(y, x), y=-x (x, y)—(-y, -x)

Rotation: 90° (x, y)—(-y, x), 180° (x, y)—(-x, -y), 270° (x, y)—(y, -x)   Dilation: k=CP'/CP

Chapter 5

Scalene 不等边 Isosceles 等腰 Equiangular 等角 Equilateral 等边　　　　　SSS, SAS, ASA, AAS, HL, CPCTC

Chapter 6

Circumcenter（中垂线相交点） Incenter（角平分线相交点） Centroid（中线相交点） Orthocenter（高相交点）

Indirect proofs and inequalities in triangles: Assume a contradiction, prove, conclusion.

Hinge thm.: If AB≅DE, BC≅EF, and ∠B<∠E, then AC<DF.