

- | | | | |
|---|--|------------------------------|---|
| 1. 5-1 Midsegment (Triangle) | Connects the midpoints of 2 sides of a triangle; parallel to 3rd side; half the length of the 3rd side. | 18. 5-7 Hinge Theorem | If two sides of one triangle are congruent to two sides of another triangle, then the longer third side is across from the larger included angle. |
| 2. 5-2 Equidistant | Equal distance from 2 or more objects. | | |
| 3. 5-2 Distance from Point to a Line | Length of the perpendicular segment from the point to the line. | | |
| 4. 5-3 Concurrent | 3 or more lines, rays, or segments that intersect at one point. | | |
| 5. 5-3 Perpendicular Bisector (Triangle) | Located at a midpoint; at a right angle. | | |
| 6. 5-3 Circumcenter (Triangle) | The point of concurrency for the perpendicular bisectors; equidistant from all 3 vertices; can be inside, outside, or on the triangle. | | |
| 7. 5-3 Circumcircle (Circumscribed about) (Triangle) | A circle drawn on the outside of a triangle; contains each vertex; center is the circumcenter. | | |
| 8. 5-3 Angle Bisector (Triangle) | Originates at a vertex; bisects the angle. | | |
| 9. 5-3 Incenter (Triangle) | The point of concurrency for the angle bisectors; equidistant from all 3 sides; always inside. | | |
| 10. 5-3 Incircle (Inscribed in) (Triangle) | A circle drawn on the inside of a triangle; touches each side; center is the incenter. | | |
| 11. 5-4 Median (Triangle) | Originates at a vertex; connects to the midpoint of the opposite side. | | |
| 12. 5-4 Centroid (Triangle) | The point of concurrency for the 3 medians; split into $\frac{1}{3}$ and $\frac{2}{3}$; center of gravity; balance; always inside. | | |
| 13. 5-4 Altitude (Triangle) | Originates at a vertex; at a right angle to the opposite side. | | |
| 14. 5-4 Orthocenter (Triangle) | The point of concurrency for the 3 altitudes; can be inside, outside, or on the triangle. | | |
| 15. 5-6 Will the sides form a triangle? | Short + Medium > Long ($S + M > L$) | | |
| 16. 8-1 Is it a right triangle? | Pythagorean Theorem $a^2 + b^2 = c^2$ | | |
| 17. 5-6 Range of lengths for third side? | Lower limit: subtract the 2 given lengths.
Upper limit: add the 2 given lengths. | | |