

FM Geometry Vocabulary/Properties/Postulates//Theorems for Chapter 3

Parallel Lines	Skew Lines	Parallel Planes	Transversal
Corresponding Angles Postulate		Corresponding Angles Converse Postulate	
Alternate Interior Angles Theorem		Alternate Interior Angles Converse Theorem	
Alternate Exterior Angles Theorem		Alternate Exterior Angles Converse Theorem	
Same-Side Interior Angles Theorem		Same-Side Interior Angles Converse Theorem	
Same-Side Exterior Angles Theorem		Same-Side Exterior Angles Converse Theorem	

Perpendicular Transversal Theorem: If a transversal is perpendicular to one of two parallel lines, then it is perpendicular to the other one also.

Parallel Postulate: Through a point outside a line, there is exactly one line parallel to the given line.

Perpendicular Postulate: Through a point outside a line, there is exactly one line perpendicular to the given line.

Thrm: Two coplanar lines perpendicular to the same line are parallel.

Thrm: Two lines parallel to a third line are parallel to each other.

Know all seven ways to prove that two lines are parallel!

Triangle Vertex Sides Scalene Triangle Isosceles Triangle Equilateral Triangle

Acute Triangle Obtuse Triangle Right Triangle Equiangular Triangle Corollary

Triangle Sum Theorem: The sum of the measures of the angles of a triangle is 180° .

Third Angles Theorem: If two angles of one triangle are congruent to two angles of another triangle, then the third angles are congruent.

Exterior Angle of a Triangle Theorem: The measure of an exterior angle of a triangle equals the sum of the measures of the two remote interior angles.

Thrm: Each angle of an equiangular triangle has measure 60° .

Thrm: The acute angles of a right triangle are complementary.

Polygon Convex Polygon Regular Polygon

Interior Angles Theorem: $I_{Sum} = (n - 2)180^\circ$ Exterior Angles Theorem: $E_{Sum} = 360^\circ$