

Selected Terms, Postulates, & Theorems

CHAPTER 3

def \parallel	Two coplanar lines that do not intersect.
def transversal	A line that intersects two or more lines in a plane at different points.
if \parallel , then $CA \cong$	If two parallel lines are cut by a transversal, then each pair of corresponding angles is congruent
if \parallel , then $AIA \cong$	If two parallel lines are cut by a transversal, then each pair of alternate interior angles is congruent
if \parallel , then $AEA \cong$	If two parallel lines are cut by a transversal, then each pair of alternate exterior angles is congruent
if \parallel , then CIA are supplementary	If two parallel lines are cut by a transversal, then each pair of consecutive interior angles is supplementary
\perp transversal Th	In a plane, if a line is perpendicular to one of two parallel lines, then it is perpendicular to the other
if $CA \cong$, then \parallel	If two lines in a plane are cut by a transversal so that corresponding angles are congruent, then the lines are parallel.
if $AEA \cong$, then \parallel	If two lines in a plane are cut by a transversal so that a pair of alternate exterior angles are congruent, then the lines are parallel.
if $AIA \cong$, then \parallel	If two lines in a plane are cut by a transversal so that a pair of alternate interior angles are congruent, then the lines are parallel.
if CIA are supplementary, then \parallel	If two lines in a plane are cut by a transversal so that a pair of consecutive interior angles are supplementary, then the lines are parallel.
	In a plane, if two lines are perpendicular to the same line, then they are parallel
\parallel Postulate {historical}	If there is a line and a point not on the line, then there exists exactly one line through the point that is parallel to the given line.