

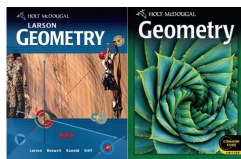
MATH NINJA

Mission: Master Math by Attacking Problems

Unit 1: Points, Lines and Planes

Learning Goal: Students will be able to use the correct terminology for basic geometric figures and conceptualize the foundational postulates in the study of Geometry. Students will focus on line segment length, partitioning and relationship to other lines in the same plane.

LT1	I can define, name and identify the basic geometry terms in complex diagrams and determine if points, lines and edges are coplanar or skew. I can solve for missing segment measures by applying the segment addition postulates.	G-CO.1.1
LT2	I can choose between and apply the midpoint and distance formulas in different contexts.	G-GPE.2.7
LT3	I can find the point that partitions a line segment in a given ratio.	G-GPE.2.7
LT4	I can identify and write the equations for parallel and perpendicular lines.	G-GPE.2.5



(Mastery, Mission Accomplished)

The **STUDY GUIDE** below aligns Algebra Nation with Khan Academy and the Textbook for lesson re-teaching, review and practice. Your teacher will assign tasks in any combination of the 3 resources to enrich your understanding of the material.

Remediation and Enrichment (CARE Assignments)

ALGEBRA NATION LESSON	KHAN ACADEMY VIDEO	KHAN ACADEMY PRACTICE	TEXTBOOK
Topic 1: Basics of Geometry – Part 1 Topic 2: Basics of Geometry – Part 2	Intro to Euclidean Geometry <ul style="list-style-type: none"> Terms & labels in geometry Lines, line segments, & rays Specifying planes in three dimensions 	<ul style="list-style-type: none"> Identify rays, lines, & line segments Draw rays, lines & line segments Points, lines, and planes 	Holt (Green) Regular: Ch. 1 Sections 1 – 2 Larson (Blue) Honors: Ch. 1 Sections 1 – 2
Topic 3: Midpoint and Distance in the Coordinate Plane – Part 1 Topic 4: Midpoint and Distance in the Coordinate Plane – Part 2	Distance Formula <ul style="list-style-type: none"> Distance formula Midpoint formula <i>Study Guides</i> <ul style="list-style-type: none"> Distance formula Midpoint formula Distance formula review Midpoint formula review Challenge/Extension <ul style="list-style-type: none"> Area of trapezoid on the coordinate plane 	<ul style="list-style-type: none"> Distance between two points Midpoint formula Challenge/Extension Practice <ul style="list-style-type: none"> Area and Perimeter in the Coordinate Plane 	Holt (Green) Regular: Ch. 1 Section 6 Larson (Blue) Honors: Ch. 1 Section 3
Topic 5: Partitioning a Line Segment – Part 1 Topic 6: Partitioning a Line Segment – Part 2	Directed Line Segments <ul style="list-style-type: none"> Dividing line segments: graphical Dividing line segments 	<ul style="list-style-type: none"> Divide line segments 	Holt (Green) Regular: Ch. 7 Extension (p.515) Larson (Blue) Honors: Ch. 7 Extension (p.410)
Topic 7: Parallel and Perpendicular Lines – Part 1 Topic 8: Parallel and Perpendicular Lines – Part 2	Parallel & perpendicular lines on the coordinate plane <ul style="list-style-type: none"> Parallel & perpendicular lines – introduction Parallel & perpendicular lines from graph Equations of parallel & perpendicular lines <ul style="list-style-type: none"> Parallel lines from equation Parallel lines from example 2 Parallel lines from example 3 Perpendicular lines from equation Writing equations of perpendicular lines Writing equations of perpendicular lines (example 2) Proofs: parallel lines have the same slope Proof: perpendicular lines have negative reciprocal slope 	<ul style="list-style-type: none"> Parallel & perpendicular lines from graph Parallel & perpendicular lines from equation Write equations of parallel & perpendicular lines 	Holt (Green) Regular: Ch. 3 Sections 4 – 6 Larson (Blue) Honors: Ch. 3 Sections 4 – 6

