

Geometry CR

State Standard Number	State Standard Area/Description	Unit Name	Course Topic Description
N	Number and Operations		
N.1	Understand numbers, ways of representing numbers, relationships among numbers and number systems	Connections from Algebra	Section 2
N.1.A	compare and order rational and irrational numbers, including finding their approximate locations on a number line	Connections from Algebra	Section 2
N.1.B	use real numbers and various models, drawing, etc. to solve problems	Connections from Algebra	Section 2
N.2	Understand meanings of operations and how they relate to one another	Throughout	Throughout
N.2.D	apply operations to real numbers, using mental computation or paper-and-pencil calculations for simple cases and technology for more complicated cases	Throughout	Throughout
N.3	Compute fluently and make reasonable estimates		
N.3.D	judge the reasonableness of numerical computations and their results		
N.3.E	solve problems involving proportions	Similarity	Section 1
A	Algebraic Relationships		

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A.1	Understand patterns, relations and functions		
A.1.B	generalize patterns using explicitly or recursively defined functions		
A.1.C	compare and contrast various forms of representations of patterns		
A.2	Represent and analyze mathematical situations and structures using algebraic symbols	Throughout	Throughout
A.2.B	apply appropriate properties of exponents to simplify expressions and solve equations		
A.3	Use mathematical models to represent and understand quantitative relationships		
A.3.A	identify quantitative relationships and determine the type(s) of functions that might model the situation to solve the problem		
A.4	Analyze change in various contexts		

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A.4.A	analyze linear functions by investigating rates of change and intercepts		
G	Geometric and Spatial Relationships		
G.1	Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships	Quadrilaterals and Polygons	Sections 1-5
G.1.A	use inductive and deductive reasoning to establish the validity of geometric conjectures, prove theorems and critique arguments made by others		
G.2	Specify locations and describe spatial relationships using coordinate geometry and other representational systems	Perimeter and Area	Section 6
G.2.A	make conjectures and solve problems involving 2-dimensional objects represented with Cartesian coordinates	Perimeter and Area	Section 6
G.3	Apply transformations and use symmetry to analyze mathematical situations	Perimeter and Area	Section 6
G.3.A	use and apply constructions and the coordinate plane to represent translations, reflections, rotations and dilations of objects		

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G.3.C	identify types of symmetries of 2- and 3- dimensional figures		
G.4	Use visualization, spatial reasoning and geometric modeling to solve problems	Perimeter and Area	Sections 1-5
G.4.A	draw and use vertex-edge graphs or networks to find optimal solutions and draw representations of 3-dimensional geometric objects from different perspectives		
G.4.B	draw or use visual models to represent and solve problems	Perimeter and Area	Sections 1-5
M	Measurement		
M.2	Apply appropriate techniques, tools and formulas to determine measurements	Perimeter and Area	Sections 1-5
M.2.B	solve problems of angle measure, including those involving triangles or other polygons and of parallel lines cut by a transversal	Right Triangles and Trigonometry Quadrilaterals and Polygons Parallel Lines and Coordinate Plane	Section 1 Sections 1-5 Section 1
M.2.C	determine the surface area, and volume of geometric figures, including cones, spheres, and cylinders	Perimeter and Area	Section 4 Section 5

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M.2.E	use unit analysis to solve problems		
D	Data and Probability		
D.1	Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them		
D.1.A	formulate and collect data about a characteristic		
D.1.C	select and use appropriate graphical representation of data and given one-variable quantitative data, display the distribution and describe its shape		