

Corresponding Section in Geometry Book	Pace	Common Core Unit	Common Core Standard	GEOMETRY MAP
1.2	1st Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
1.3	1st Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
1.3	1st Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
1.3	1st Qrt	UNIT 4	G.GPE.7	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.
1.4	1st Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
1.4	1st Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
1.5	1st Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
Page 34 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	constructing perpendicular bisector of a line segment
Page 36 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	bisecting an angle using geometric constructions
1.6	1st Qrt	UNIT 1	G.CO.10	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
1.6	1st Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
Page 104 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	copying a segment using geometric constructions

2.6	1st Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
Page 130 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	constructing perpendicular lines
Page 159 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	copying an angle using geometric constructions
Page 159 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	constructing a line parallel to a given line through a point not on the line.
3.6	1st Qrt	UNIT 4	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
3.6	1st Qrt	UNIT 4	G.GPE.5	Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
3.7	1st Qrt	UNIT 4	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
3.7	1st Qrt	UNIT 4	G.GPE.5	Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems (e.g., find the equation of a line parallel or perpendicular to a given line that passes through a given point).
4.1	1st Qrt	UNIT 1	G.CO.10	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
4.2	1st Qrt	UNIT 1	G.CO.6	Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
4.2	1st Qrt	UNIT 1	G.CO.7	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
4.2	1st Qrt	UNIT 1	G.CO.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
4.3	1st Qrt	UNIT 1	G.CO.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.

4.4	1st Qrt	UNIT 1	G.CO.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
Page 231 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	copying an angle using geometric constructions
Page 234 and/or Geogebra	1st Qrt	UNIT 1	G.CO.12	bisecting an angle using geometric constructions
4.6	2nd Qrt	UNIT 1	G.CO.8	Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.
4.7	2nd Qrt	UNIT 4	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
4.7	2nd Qrt	UNIT 4	G.GPE.7	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.
5.1	2nd Qrt	UNIT 1	G.CO.9	Prove theorems about lines and angles. Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.
Page 264 and/or Geogebra	2nd Qrt	UNIT 1	G.CO.12	constructing perpendicular bisector of a line segment
5.2	2nd Qrt	UNIT 5	G.C.3	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.
5.2	2nd Qrt	UNIT 1	G.CO.10	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
5.2	2nd Qrt	UNIT 1	G.CO.13	Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.
5.3	2nd Qrt	UNIT 1	G.CO.10	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
5.4	2nd Qrt	UNIT 1	G.CO.10	Prove theorems about triangles. Theorems include: measures of interior angles of a triangle sum to 180° ; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.
5.4	2nd Qrt	UNIT 2	G.SRT.4	Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.

6.2	2nd Qrt	UNIT 1	G.CO.11	Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.
6.3	2nd Qrt	UNIT 1	G.CO.11	Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.
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6.5	2nd Qrt	UNIT 5	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
6.6	2nd Qrt	UNIT 5	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
6.6	2nd Qrt	UNIT 4	G.GPE.7	Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.
7.1	3rd Qrt	UNIT 1	G.CO.2	Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).
7.1	3rd Qrt	UNIT 1	G.CO.4 variety of ways	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
7.1	3rd Qrt	UNIT 1	G.CO.5 Geogebra /By Hand	Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.
7.1	3rd Qrt	UNIT 1	G.CO.6	Use geometric descriptions of rigid motions to transform figures and to predict the effect of a given rigid motion on a given figure; given two figures, use the definition of congruence in terms of rigid motions to decide if they are congruent.
7.1	3rd Qrt	UNIT 1	G.CO.7	Use the definition of congruence in terms of rigid motions to show that two triangles are congruent if and only if corresponding pairs of sides and corresponding pairs of angles are congruent.
7.2	3rd Qrt	UNIT 1	G.CO.2	Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).

7.2	3rd Qrt	UNIT 1	G.CO.3	Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
7.2	3rd Qrt	UNIT 1	G.CO.4 variety of ways	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
7.2	3rd Qrt	UNIT 1	G.CO.5 Geogebra /By Hand	Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.
7.3	3rd Qrt	UNIT 1	G.CO.2	Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).
7.3	3rd Qrt	UNIT 1	G.CO.3	Given a rectangle, parallelogram, trapezoid, or regular polygon, describe the rotations and reflections that carry it onto itself.
7.3	3rd Qrt	UNIT 1	G.CO.4 variety of ways	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
7.3	3rd Qrt	UNIT 1	G.CO.5 Geogebra /By Hand	Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.
7.4	3rd Qrt	UNIT 1	G.CO.2	Represent transformations in the plane using, e.g., transparencies and geometry software; describe transformations as functions that take points in the plane as inputs and give other points as outputs. Compare transformations that preserve distance and angle to those that do not (e.g., translation versus horizontal stretch).
7.4	3rd Qrt	UNIT 1	G.CO.4 variety of ways	Develop definitions of rotations, reflections, and translations in terms of angles, circles, perpendicular lines, parallel lines, and line segments.
7.4	3rd Qrt	UNIT 1	G.CO.5 Geogebra /By Hand	Given a geometric figure and a rotation, reflection, or translation, draw the transformed figure using, e.g., graph paper, tracing paper, or geometry software. Specify a sequence of transformations that will carry a given figure onto another.
8.1	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
8.2	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

8.3	3rd Qrt	UNIT 2	G.SRT.2	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
8.3	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
8.4	3rd Qrt	UNIT 2	G.SRT.2	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
8.4	3rd Qrt	UNIT 2	G.SRT.3	Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.
8.4	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
8.5	3rd Qrt	UNIT 2	G.SRT.2	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
8.5	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
8.6	3rd Qrt	UNIT 4	G.GPE.6	Find the point on a directed line segment between two given points that partitions the segment in a given ratio.
8.6	3rd Qrt	UNIT 2	G.SRT.2	Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar; explain using similarity transformations the meaning of similarity for triangles as the equality of all corresponding pairs of angles and the proportionality of all corresponding pairs of sides.
8.6	3rd Qrt	UNIT 2	G.SRT.4	Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.
8.6	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
Page 500 and/or Geogebra	3rd Qrt	UNIT 1	G.CO.12	bisecting a segment using geometric constructions
8.7	3rd Qrt	UNIT 2	G.SRT.1	Verify experimentally the properties of dilations given by a center and a scale factor: a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged. b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.
8.7	3rd Qrt	UNIT 2	G.SRT.5	Use congruence and similarity criteria for triangles to solve problems and to prove relationships in geometric figures.

9.1	3rd Qrt	UNIT 2	G.SRT.3	Use the properties of similarity transformations to establish the AA criterion for two triangles to be similar.
9.1	3rd Qrt	UNIT 2	G.SRT.4	Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.
9.1	3rd Qrt	UNIT 2	G.SRT.6	Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
9.2	3rd Qrt	UNIT 2	G.SRT.4	Prove theorems about triangles. Theorems include: a line parallel to one side of a triangle divides the other two proportionally, and conversely; the Pythagorean Theorem proved using triangle similarity.
9.5	3rd Qrt	UNIT 2	G.SRT.6	Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
9.5	3rd Qrt	UNIT 2	G.SRT.7	Explain and use the relationship between the sine and cosine of complementary angles.
ALG 2 - 13.2	3rd Qrt	UNIT 2	G.SRT.7	Explain and use the relationship between the sine and cosine of complementary angles.
9.6	3rd Qrt	UNIT 2	G.SRT.6	Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
9.6	3rd Qrt	UNIT 2	G.SRT.8	Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.
Prior to Ch 11	4th Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
11.4	4th Qrt			Understand Pi as a ratio of Circumference to Diameter.
11.4	4th Qrt			Understand and use the formulas for Circumference of a Circle and Arc Length
11.4	4th Qrt	UNIT 5	G.C.5	Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.
11.5	4th Qrt			Understand and use the formulas for Area of a Circle and Area of a Sector of a Circle.
11.5	4th Qrt	UNIT 5	G.C.5	Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for the area of a sector.
12.1	4th Qrt	UNIT 3	G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.
12.1	4th Qrt	UNIT 3	G.GMD.4	Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.
12.1	4th Qrt	UNIT 2	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).
12.2	4th Qrt	UNIT 3	G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.

12.2	4th Qrt	UNIT 2	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).
12.3	4th Qrt	UNIT 3	G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.
12.3	4th Qrt	UNIT 2	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).
12.4	4th Qrt	UNIT 3	G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.
12.4	4th Qrt	UNIT 3	G.GMD.3	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
12.4	4th Qrt	UNIT 2	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).
12.5	4th Qrt	UNIT 3	G.GMD.1	Give an informal argument for the formulas for the circumference of a circle, area of a circle, volume of a cylinder, pyramid, and cone. Use dissection arguments, Cavalieri's principle, and informal limit arguments.
12.5	4th Qrt	UNIT 3	G.GMD.3	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
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12.6	4th Qrt	UNIT 3	G.GMD.3	Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
12.6	4th Qrt	UNIT 2	G.MG.2	Apply concepts of density based on area and volume in modeling situations (e.g., persons per square mile, BTUs per cubic foot).
10.1	4th Qrt	UNIT 5	G.C.1	Prove that all circles are similar.
10.1	4th Qrt	UNIT 5	G.C.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles of a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
10.1	4th Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
10.2	4th Qrt	UNIT 5	G.C.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles of a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
10.2	4th Qrt	UNIT 1	G.CO.1	Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.
10.2	4th Qrt	UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).

10.3	4th Qrt	UNIT 5	G.C.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles of a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
10.3	4th Qrt	UNIT 5	G.C.3	Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.
10.3	4th Qrt	UNIT 1	G.CO.13	Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.
10.3	4th Qrt	UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
10.4	4th Qrt	UNIT 5	G.C.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles of a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
10.4	4th Qrt	UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
10.5	4th Qrt	UNIT 5	G.C.2	Identify and describe relationships among inscribed angles, radii, and chords. Include the relationship between central, inscribed, and circumscribed angles; inscribed angles of a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
10.5	4th Qrt	UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
10.6	4th Qrt	UNIT 5	G.GPE.1	Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle given by an equation.
10.6	4th Qrt	UNIT 5	G.GPE.4	Use coordinates to prove simple geometric theorems algebraically. For example, prove or disprove that a figure defined by four given points in the coordinate plane is a rectangle; prove or disprove that the point $(1, \sqrt{3})$ lies on the circle centered at the origin and containing the point $(0, 2)$.
10.6	4th Qrt	UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.1	Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events ("or," "and," "not").
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.2	Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.3	Understand the conditional probability of A given B as $P(A \text{ and } B)/P(B)$, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.

11.6 - need more resource	4th Qrt	UNIT 6	S.CP.4	Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities. For example, collect data from a random sample of students in your school on their favorite subject among math, science, and English. Estimate the probability that a randomly selected student from your school will favor science given that the student is in tenth grade. Do the same for other subjects and compare the results.
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.5	Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations. For example, compare the chance of having lung cancer if you are a smoker with the chance of being a smoker if you have lung cancer.
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.6	Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.
11.6 - need more resource	4th Qrt	UNIT 6	S.CP.7	Apply the Addition Rule, $P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)$, and interpret the answer in terms of the model.
continuously		UNIT 2 UNIT 3 UNIT 5	G.MG.1	Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).
continuously		UNIT 2	G.MG.3	Apply geometric methods to solve design problems (e.g., designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).
ALG 2 chapter 5 & PRE CALC		UNIT 4	G.GPE.2	Derive the equation of a parabola given a focus and directrix.