

COURSE:

Competency Constructions- I can construct geometric figures using only a compass and straight edge.			
Standard - Description			
Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	• Type	• Type
3.0	I can predict the outcome of rigid transformations on geometric figures.		
2.0	<ul style="list-style-type: none">- Define rigid transformation as those that preserve corresponding angle measures and the distance between points- List the rigid transformations	Resources	
		• Type here	
Evidence			
• Type			

COURSE:

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard - Description

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none">TypeType	
3.0	I can prove that two figures are similar or congruent using a sequence of transformations		
2.0	<ul style="list-style-type: none">Define rigid transformation as those that preserve corresponding angle measures and the distance between pointsList the rigid transformations	Resources	
		<ul style="list-style-type: none">Type here	
Evidence			
<ul style="list-style-type: none">Type			

COURSE:

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard - Description

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<div>• Type</div> <div>• Type</div>	
3.0	I can determine the change in coordinate location of a point under a given rigid transformation		
2.0	<div>- Define rigid transformation as those that preserve corresponding angle measures and the distance between points</div> <div>- List the rigid transformations</div>	Resources	
		<div>• Type here</div>	
Evidence			
<div>• Type</div>			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.2

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none">• Angle• Coordinates• Corresponding• Image• Line of reflection• Line• Non-rigid transformation	<ul style="list-style-type: none">• Point of rotation• Point• Reflection• Rigid transformation• Rotation• Transformation• Translation
3.0	NT1- I can compare the effects of rigid transformations versus non-rigid transformations on a given geometric figure	Resources	
2.0	<ul style="list-style-type: none">• Explain that a transformation of a figure involves taking the coordinates of the points that make up that figure and changing them into a different set of coordinates or points.• Explain that the new shape resulting from a transformation is known as the original shape's image.• Explain that translation, rotation, and reflection are rigid transformations.• Explain that rigid transformations preserve corresponding angle measures and the distances between corresponding points.• Explain that translation involves moving all the points of a figure the same distance and direction.• Explain that rotation involves rotating all the points of a figure the same direction and same amount around the point of rotation.• Explain that reflection involves reflecting all the points of a figure across a straight line.• Explain that dilation, stretch, and compression are non-rigid transformations.• Explain that dilation involves moving all points in a figure by an equal scale factor in relation to the center of dilation.• Explain that dilation preserves corresponding angle measures, but not distances between corresponding points.• Explain that stretch and compression involve multiplying or dividing the x- or y-coordinates of all the points in a figure by the same amount.	<ul style="list-style-type: none">• Type here	

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.SRT.1a, G.SRT.1b

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none">• Angle• Center of dilation• Compression• Coordinates• Corresponding• Dilation• Image• Line• Non-rigid transformation• point• Side length• Stretch• transformation	
3.0	NT2 I can compare the results of dilations with varying centers and scale factors performed on the same geometric figure		
2.0	<ul style="list-style-type: none">• State that dilation is a non-rigid transformation.• Explain that dilation involves moving all points in a figure by an equal scale factor in relation to the center of dilation.• Explain that a center of dilation can be identified by drawing lines through the corresponding vertices of a figure and its dilated image and identifying the point at which the lines intersect.• Explain that dilation preserves corresponding angle measures, but not distances between corresponding points.• Explain that a dilation moves a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.• Perform dilation on a geometric figure.• Measure the side lengths and angle measures of a figure before and after dilation.	Resources	
		<ul style="list-style-type: none">• Type here	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.12, G.CO.1

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<div><div><ul style="list-style-type: none">• Angle• Compass• Congruent• Corresponding Angles• Equidistant• Line</div><div><ul style="list-style-type: none">• Line Segment• Parallel• Point• Rhombus• Transversal</div></div>	
3.0	LAC1- I can explain a construction of parallel lines		
2.0	<ul style="list-style-type: none">• State that parallel lines are lines that never intersect (they always maintain the same distance from each other).• Explain that a compass is used to mark all points an equal distance from a central point.• List the steps necessary to construct a line that passes through a specified point and that is parallel to another line using a straight edge and compass.• List the properties of rhombuses (four congruent sides, parallel opposite sides).• Construct a rhombus using a compass and straight edge.• Explain that if the corresponding angles of two lines crossed by a transversal are congruent, the lines are parallel.• Explain the steps necessary to construct a copy of a given angle using a straight edge and compass. For example, explain that copying an angle with a compass involves constructing a triangle atop the original angle and then constructing a second triangle congruent to the first.• Copy an angle using a compass and straight edge.• Explain that if all of the corresponding sides of two triangles are congruent then all of their corresponding angles are also congruent (the triangles are congruent).• Construct congruent triangles using a compass and straight edge.	Resources	
		<div><ul style="list-style-type: none">• Type here</div>	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.12, G.CO.1

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<div><div><ul style="list-style-type: none">• Angle• Base Angles• Bisector• Compass• Corresponding• Endpoint• Equidistant• Intersect</div><div><ul style="list-style-type: none">• Isosceles Triangle• Line• Line Segment• Perpendicular• Perpendicular Bisector• Point• Right Angle• SSS Theorem</div></div>	
3.0	LAC2- I can explain a construction of a perpendicular bisector		
2.0	<div><ul style="list-style-type: none">• Explain that the perpendicular bisector of a line segment is a line that intersects the segment at a right angle and divides it into two congruent lengths.• List the steps necessary to construct a perpendicular bisector using a straight edge and compass.• Explain that any point on a perpendicular bisector of a line segment is equidistant from both of the line segment’s endpoints.• List the properties of isosceles triangles (two congruent sides, congruent base angles).• List the properties of congruent triangles (congruent corresponding sides, congruent corresponding angles).• Identify congruent and similar triangles. For example, explain that if all three sides of a given a triangle are congruent to all three sides of a second triangle, the triangles are congruent (SSS [Side-Side-Side] Theorem).</div>	Resources	
		<div><ul style="list-style-type: none">• Type here</div>	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.12, G.CO.1

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none">• Angle• Angle Bisector• Compass• Congruent• Corresponding <ul style="list-style-type: none">• Equidistant• Line• Line Segment• Ray• Vertex	
3.0	LAC3- I can explain a construction of an angle bisector		
2.0	<ul style="list-style-type: none">• Explain that an angle bisector is a line that bisects an angle into two congruent angles.• List the steps necessary to construct an angle bisector using a straight edge and compass.• Construct congruent triangles using a compass and straight edge.• Identify congruent triangles.• List the properties of congruent triangles (congruent corresponding sides, congruent corresponding angles).	Resources	
		<ul style="list-style-type: none">• Type here	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<div><div><ul style="list-style-type: none">• Angle• Boundary• Center• Circle• Circumference• Compass• Congruent• Right angle• Square</div><div><ul style="list-style-type: none">• Diagonal• Diameter• Inscribed• Line segments• Perpendicular Bisector• Plane• Point• Polygon• Quadrilateral• Vertices</div></div>	
3.0	CPC1- I can construct a square inscribed within a circle		
2.0	<div><ul style="list-style-type: none">• Explain that a polygon inscribed within a circle will have all of its vertices on the circumference of the circle.• State that a square is a quadrilateral with four congruent sides and four right angles.• Explain that the diagonals of a square are perpendicular bisectors of each other.• Explain that a compass can be used to mark all points that are an equal distance from a central point.• Draw a diameter of a circle.• Construct a perpendicular bisector to a line segment.</div>	Resources	
		<div><ul style="list-style-type: none">• Type here</div>	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.C0.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none"> • Angle • Arc • Boundary • Center • Central angle • Circle • Circumference • Compass • Congruent • Diagonal • Diameter 	<ul style="list-style-type: none"> • Inscribed angle • Inscribed • intersect • plane • Point • Polygon • Radius • Ray • Vertices
3.0	CPC2- I can construct an equilateral triangle inscribed within a circle		
2.0	<ul style="list-style-type: none"> • Explain that a polygon inscribed within a circle will have all of its vertices on the circumference of the circle. • State that an equilateral triangle is a polygon with three congruent sides and three congruent angles. • Explain that the angles of an equilateral triangle all have a measure of . • Explain that a compass can be used to mark all points that are an equal distance from a central point. • Construct congruent circles such that the center of each intersects the circumference of the other. • Explain that the distance from the center of a circle to its circumference is constant for all points on the circumference. • Connect the points of intersection of two overlapping congruent circles whose circumferences intersect each other's centers to form small equilateral triangles with side lengths equal to the radius of the circles. • Explain that when a circle's circumference is divided into three congruent arcs, each arc has a central angle measure of . • Construct three congruent central angles within a circle. • Explain that the measure of an inscribed angle is half the measure of the central angle that intercepts the same arc. 	Resources <ul style="list-style-type: none"> • Type here 	

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.CO.13 Construct an equilateral triangle, a square, and a regular hexagon inscribed in a circle.

Learning Targets & Skills		Vocabulary	
4.0	Type here	<div><div><ul style="list-style-type: none">• Boundary• Center• Circle• circumference• Compass• Congruent• Diameter• radius</div><div><ul style="list-style-type: none">• Hexagon• Inscribed• Intersect• Plane• Point• Polygon• Regular Polygon• Vertices</div></div>	
3.0	CPC3- I can construct a regular hexagon inscribed within a circle		
2.0	<div><ul style="list-style-type: none">• Explain that a polygon inscribed within a circle will have all of its vertices on the circumference of the circle.• State that a regular polygon is a closed plane figure with all sides congruent and all angles congruent.• State that a hexagon is a polygon with six sides.• Explain that a compass can be used to mark all points that are an equal distance from a central point.• Draw a diameter of a circle.• Construct congruent circles such that the center of each intersects the circumference of the other.• Explain that the distance from the center of a circle to its circumference is constant for all points on the circumference.• Define an equilateral triangle as a polygon with three congruent sides and three congruent angles.• Connect the points of intersection of two overlapping congruent circles whose circumferences intersect each other’s centers to form small equilateral triangles with side lengths equal to the radius of the circles.• Construct six congruent central angles within a circle.</div>	Resources	
		<div><ul style="list-style-type: none">• Type here</div>	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.C.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	• Type here	• Type here
3.0	CICT1- I can construct the circumscribed circle of a triangle		
2.0	<ul style="list-style-type: none">• State that a triangle’s circumcircle is the circle whose boundary passes through all three vertices of the triangle.• Explain that the circumcircle of a triangle is also known as the circumscribed circle of the triangle.• State that a triangle’s circumcenter is the point equidistant from all three vertices of the triangle.• Explain that a triangle’s circumcenter is also the center of its circumscribed circle.• Explain that the distance from the circumcenter of a triangle to any of its vertices is the radius of its circumscribed circle.• Explain that the perpendicular bisectors of all three of a triangle’s sides intersect at the triangle’s circumcenter.• Construct the perpendicular bisector of a line segment using a compass.	Resources	
		• Type here	
Evidence			

Competency Constructions- I can construct geometric figures using only a compass and straight edge.

Standard – G.C.3 Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle

Learning Targets & Skills		Vocabulary	
4.0	Student goes above and beyond simple mastery to demonstrates a deeper understanding than a Level 3.0.	<ul style="list-style-type: none">• Angle• Angle bisector• Boundary• Center• Circle• Incenter• Incircle <ul style="list-style-type: none">• Inradius• Inscribed circle• Intersect• Radius• Triangle	
3.0	CICT2- I can construct the inscribed circle of a triangle		
2.0	<ul style="list-style-type: none">• State that a triangle’s incircle is the circle whose boundary intersects each side of the triangle at a single point.• Explain that the incircle of a triangle is also known as the inscribed circle of the triangle.• Define a triangle’s incenter as the point equidistant from all three sides of the triangle.• Explain that the distance between a triangle’s incenter and any of its sides is known as the triangle’s inradius.• Explain that a triangle’s incenter is also the center of its inscribed circle.• Explain that a triangle’s inradius is the radius of its inscribed circle.• Explain that the bisectors of all three of a triangle’s angles meet at the triangle’s incenter.• Construct the bisector of an angle using a compass.	Resources	
		<ul style="list-style-type: none">• Type here	