

Geometry Syllabus 2022 - 2023

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Requested Supply List

- ❖ 3 Subject Notebook or 3 ring binder with paper
- ❖ PENCILS (Math is not ink friendly!)

Classroom Rules

- ❖ Academic Integrity is the commitment to and demonstration of honest and moral behavior in an academic setting. This applies to classroom and at home online assignments.
- ❖ NO CHEATING! You run the risk of not receiving course credit.
- ❖ Listen and Read often!
- ❖ Be prepared for class.
- ❖ Don't get up without permission unless it is work necessary.
- ❖ NO CELL PHONES! Cell phones **MUST** be silenced and placed in the calculator pockets each day.

Grading

- ❖ 70% Notes, Classwork, Review Packets, Homework, Activities, Projects, etc.
 - **All Classwork, Homework, & Review Packets must be completed 100% or no credit will be given.**
- ❖ 15% Mini Quizzes & Mastery Connect
- ❖ Mini Quizzes; timed and occur 2 times a week after Lesson 4 is complete
 - Minimum 4 questions; Maximum 8 questions
 - 15 minutes to complete
 - 4 Standards Assessed
 - Scored as 4 correct - 100%; 3 - 85; 2 - 70; 1 - 55; 0 - 40
- ❖ MasteryConnect
 - 5 - 10 questions
 - 1 - 5 Specific Standards Assessed
 - Single Standard Scored as
 - Mastered - 100%; On Track - 85; Approaching - 70; Below - 55
 - Multi-Standard Scored as
 - Cube Root of % Correct * 21.5443
- ❖ 15% Term Exams via MasteryConnect
- ❖ EOC Assessment will be 15% of overall score
- ❖ **Percentages are subject to change!!!!**

Digital Platforms

- ❖ Skyward – Grades/Attendance
- ❖ Google Classroom – Communication & Assignment List
- ❖ DeltaMath – Assignments & Assessments
- ❖ MasteryConnect - Assessments
- ❖ Quizlet; Blooket – Study Terms/Formulas/Games
- ❖ Zoom – Communication & Presentation

Geometry Reference Sheet

Reflect x-axis

$$(x, y) \rightarrow (x, -y)$$

Reflect y-axis

$$(x, y) \rightarrow (-x, y)$$

Reflect $y = x$

$$(x, y) \rightarrow (y, x)$$

Reflect $y = -x$

$$(x, y) \rightarrow (-y, -x)$$

Rotate 90° ccw

$$(x, y) \rightarrow (-y, x)$$

Rotate 180°

$$(x, y) \rightarrow (-x, -y)$$

Rotate 270° ccw

$$(x, y) \rightarrow (y, -x)$$

Sine

$$\frac{\text{opposite}}{\text{hypotenuse}}$$

Cosine

$$\frac{\text{adjacent}}{\text{hypotenuse}}$$

Tangent

$$\frac{\text{opposite}}{\text{adjacent}}$$

Distance Formula

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

Midpoint Formula

$$\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

Directed Line Segment x

$$x_1 + \frac{r_1}{r_1 + r_2}(x_2 - x_1)$$

Directed Line Segment y

$$y_1 + \frac{r_1}{r_1 + r_2}(y_2 - y_1)$$

Slope from Standard Form

$$-\frac{A}{B}; Ax + By = C$$

Volume of Rectangular Prism

$$V = l * w * h$$

Volume of Cylinder

$$V = \pi * r^2 * h$$

Volume of Cone

$$V = \frac{1}{3} * \pi * r^2 * h$$

Volume of Sphere

$$V = \frac{4}{3} * \pi * r^3$$

Surface Area of Rectangular Prism

$$SA = 2 * l * w + 2 * l * h + 2 * w * h$$

Surface Area of Cylinder

$$SA = 2 * \pi * r * (r + h)$$

Sector Area

$$\frac{m}{360} * \pi * r^2$$

Geometry Pacing Guide

Lesson #	Standard	Title	Tentative # day(s)
		Unit 1 - Definitions & Transformations	7
Lesson #1	CO.A.1	Name Line, Line Segment, Ray; Name Angles; Name Planes; Parallel, Perpendicular, Skew Lines/ Planes	2
Lesson #2	CO.A.2 CO.A.3 CO.A.4 CO.A.5	Translations - Translations of a Point - Translate Figure Graphically	1
Lesson #3	CO.A.2 CO.A.3 CO.A.4 CO.A.5	Reflections - Reflection of a Point - Reflect Figure over a Line (Level 1; 3 & 4 points)	1
Lesson #4	CO.A.2 CO.A.3 CO.A.4 CO.A.5	Rotations - Rotation of a Point - Rotate Figure about the Origin (Guided; 3 & 4 points)	1
Lesson #5	CO.A.2 CO.A.3 CO.A.4 CO.A.5	Composition of Transformations - Rotation & Reflection Rules - Identify Single Rotation or Reflection - Identify Transformations (Rigid Motions) - Composition of Transformations (Discovery)	1
Review Packet #1			1
		Unit 2 - Congruence	15
Lesson #6	CO.B.6 CO.B.7	Congruence via Rigid Motions (Basic; Take out Dilations); Congruence via Rigid Motions	1
Lesson #7	CO.B.6 CO.B.7	Congruence & Corresponding Parts; Identify Corresponding Parts of Congruent Figures; Corresponding Parts of Congruent Figures are Congruent	1
Lesson #8	CO.C.9	Lines & Angle Theorems - Identify Angles with Terminology - Vertical, Adjacent, Complementary Angles (Level 1) - Vertical, Adjacent, Complementary Angles (Level 2)	3

		<ul style="list-style-type: none"> - Finding Angles in Transversal Problems (Level 1) - Finding Angles in Transversal Problems (Level 2) - Angle Bisector - Angle Addition & Subtraction 	
Lesson #9	CO.C.10	<p>Triangle Theorems</p> <ul style="list-style-type: none"> - Solve for Interior Angles - Triangle (Level 1) - Exterior Angles - Triangle - Circumcenter, Incenter, Orthocenter, Centroid - Triangle Midsegment (Numeric) - Short Proofs - No Triangle Congruence 	3
Lesson #10	CO.C.11	<p>Parallelogram Theorems</p> <ul style="list-style-type: none"> - Identify Quadrilaterals (Basic) - Identify Quadrilaterals (Level 1) - Parallelogram Properties Angles - Parallelogram Properties Diagonals - Parallelogram/Rhombus Properties Sides & Angles 	2
Lesson #11	CO.B.8	Triangle Congruence Criteria; Congruence / Mapping w/o Coordinate Plane (Level 1)	1
Lesson #12	CO.B.8 CO.C.9 CO.C.10 CO.C.11	<p>Proofs</p> <ul style="list-style-type: none"> - Proving Quadrilateral Properties - Finding Angles w/ Justification (Level 1) - Quadrilateral Proofs (Level 1) - Quadrilateral Proofs (Level 2) 	3
Review Packet #2			1
		Unit 3 - Similarity & Right Triangles	4
Lesson #13	SRT.A.1 SRT.A.2	Find the Scale Factor (Level 2); Similar Figures Direct Scale (Level 1)	1
Lesson #14	SRT.A.3	Congruence vs Similarity; Proving Triangles are Similar	1
Lesson #15	SRT.B.4 SRT.B.5	Side Splitter Theorem	1
Review Packet #3			1
		Unit 4 - Trigonometry	7
Lesson #16	SRT.C.6 SRT.C.7	Identify Opposite, Adjacent, Hypotenuse;	2

		Identifying Tri Ratios (Level 2); Identify Trig Ratios Timed; Sine/Cosine of Complementary Angles (L1)	
Lesson #17	SRT.C.8	Use Trig to find a Side; Use Trig to find an Angle	1
Lesson #18	SRT.C.8	Trig Word Problems (Level 1)	1
Lesson #19	SRT.C.8	Law of Sines	1
Lesson #20	SRT.C.8	Law of Cosines (SAS); Law of Cosines (SSS)	1
Review Packet #4			1
		Unit 5 - Geometric Properties	5
Lesson #21	GPE.B.2	Coordinate Distance (Decimal); Midpoint Formula	1
Lesson #22	GPE.B.2 GPE.B.5	Perimeter Given Coordinates	1
Lesson #23	GPE.B.4	Ratios of Directed Line Segments	1
Lesson #24	GPE.B.3	Parallel/Perpendicular Through a Point	1
Review Packet #5			1
		Unit 6 - Measurement & Dimension; Geometric Modeling	5
Lesson #25	GMD.A.1 GMD.A.2 MG.A.1 MG.A.2	Volume of Rectangular Prism; Surface Area of Rectangular Prism; Volume, Density, & Unit Conversion (Level 1; Density & Cost)	1
Lesson #26	GMD.A.1 GMD.A.2 MG.A.1 MG.A.2	Volume of Cylinder; Surface Area of Cylinder; Volume, Density, & Unit Conversion (Level 1; Density & Cost)	1
Lesson #27	GMD.A.1 GMD.A.2 MG.A.1 MG.A.2	Volume of Cone	1
Lesson #28	GMD.A.1 GMD.A.2 MG.A.1 MG.A.2	Volume of Sphere	1
Review Packet #6			1
		Unit 7 - Circles	5
Lesson #29	CO.A.1 C.A.1 C.A.2	Parts of a Circle; Central/Inscribed Angles (Level 1); Angles Formed by Chords, Tangents, Secants (Level 1)	2
Lesson #30	C.B.4	Sector Area (Level 1)	1

Lesson #31	GPE.A.1	Find Circle Center & Radius from Equation (Conic Form); Circle Equations	1
Review Packet #7			1
EOC Practice Test			2