**Geometry Syllabus 2024 - 2025**
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**Requested Supply List**
- ❖ 2 in binder
- ❖ 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 absolutely necessary (i.e., you need a pencil or tissue).
- ❖ NO CELL PHONES! Cell phones **MUST** be silenced and placed in the calculator pockets or backpacks/pockets each day.

**Grading**
- ❖ 65% Notes, Classwork, Review Packets, Homework, Activities, Notebook checks, etc.
  - ➢ **All Classwork, Homework, & Review Packets must be completed 100% or no credit will be given.**
- ❖ 20% Projects and Mini Quizzes, & MasteryConnect Assignments
  - ➢ Mini Quizzes; timed and occur 2 or 3 times a week
  - ➢ MasteryConnect Mini Quizzes
  - ➢ 4 - 10 questions
  - ➢ 1 - 5 Specific Standards Assessed
  - ➢ Cube Root grading scale (like EOC)
- ❖ 15% Term Exams via MasteryConnect
- ❖ EOC Assessment will be 15% of overall FIN (whole semester) score
- ❖ **Percentages are subject to change!!!!**

**Digital Platforms**
- ❖ Skyward – Grades/Attendance
- ❖ Google Classroom – Communication & Assignment List
- ❖ enVision Savvas Realize (Textbook; Online Homework)
- ❖ MyLabsPlus - Homework
- ❖ DeltaMath – Homeworks and Review Packets
- ❖ MasteryConnect - Mini Quizzes; Benchmark Testing
- ❖ Quizlet; Blooket; Kahoot – Study Terms/Formulas/Games
- ❖ Zoom – Communication & Presentation (Hopefully we won't need this)

# 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 | $\frac{opposite}{hypotenuse}$ |
| Cosine | $\frac{adjacent}{hypotenuse}$ |
| Tangent | $\frac{opposite}{adjacent}$ |
| Distance Formula | $d = \sqrt{\left(x_2 - x_1\right)^2 + \left(y_2 - y_1\right)^2}$ |
| Midpoint Formula | $\left(\frac{x_1+x_2}{2}, \frac{y_1+y_2}{2}\right)$ |
| Union of sets in probability (U) | all the elements from the sets |
| Intersection of sets in probability (∩) | shared elements between the sets |
| Slope | $\frac{y_2 - y_1}{x_2 - x_1}$ |
| Slope from Standard Form | $\frac{-A}{B}; \ Ax + By = C$ |
| Volume of Rectangular Prism | $V = lwh$ |
| 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 | $SA = 2(lw + hl + hw)$ |
| Surface Area of Cylinder | $SA = 2\pi r^2 + 2\pi rh$ |
| Sector Area | $\frac{m}{360} * \pi r^2$ |

# Geometry Pacing Guide

| Lesson # | Standard | Title | Tentative # day(s) |
|---|---|---|---|
| | | **Unit 1 - Definitions & Transformations** | **12** |
| Lesson #1 | CO.C.8 G.N.Q.A.1 | 1-1 Measuring Segments and Angles | 1 |
| Lesson #2 | CO.D.11 CO.C.8 | 1-2 Basic Constructions 1-7 Writing Proofs/Angle Pairs 2-1 Parallel Lines and Transversals 2-2 Proving Lines Parallel | 3 |
| Lesson #3 | CO.A.1 CO.A.3 CO.A.4 CO.B.5 | 3-2 Translations | 1 |
| Lesson #4 | CO.A.1 CO.A.3 CO.A.4 CO.B.5 | 3-1 Reflections | 1 |
| Lesson #5 | CO.A.1 CO.A.3 CO.A.4 CO.B.5 | 3-3 Rotations | 1 |
| Lesson #6 | CO.A.1 CO.A.2 CO.A.3 CO.A.4 CO.B.5 | 3-2 Compositions of Rigid Motions 3-4 Classification of Rigid Motions 3-5 Symmetry | 2 |
| Lesson #7 | GPE.A.1 GPE.A.3 N.Q.A.1 | 1-3 Midpoint and Distance;include from the center of a circle and a point on the circle | 1 |
| Lesson #8 | GPE.A.1 GPE.A.2 GPE.A.3 | 9-1 Polygons in the Coordinate Plane | 1 |
| **Review Packet #1** | | | 1 |
| | | **Unit 2 - Congruence** | **13** |
| Lesson #9 | CO.A.4 CO.B.5 CO.B.6 | 4-1 Congruence | 1 |
| Lesson #10 | CO.C.9 | 2-3 Triangle Angle Sums 4-2 Isosceles and Equilateral Triangles | 1 |

| | | | |
|---|---|---|---|
| Lesson #11 | CO.C.8<br>CO.C.9 | 5-1 Perpendicular and Angle Bisectors<br>5-2 Bisectors in Triangles<br>5-3 Medians and Altitudes<br>5-4 Inequalities in One Triangle | 2 |
| Lesson #12 | CO.B.5<br>CO.B.6<br>CO.B.7 | 4-3 SAS and SSS Congruence Criteria<br>4-4 ASA and AAS Congruence Criteria<br>4-5 Congruence in Right Triangles | 2 |
| Lesson #13 | CO.C.9 | 6-1 The Polygon Angle-Sum Theorem | 1 |
| Lesson #14 | SRT.B.3 | 6-2 Kites and Trapezoids | 1 |
| Lesson #15 | CO.C.10<br>SRT.B.3 | 6-3 Properties of Parallelograms<br>6-5 Properties of Special Parallelograms<br>6-6 Conditions of Special Parallelograms | 2 |
| Lesson #16 | CO.C.9 | 4-3, 4-4, 4-5, 6-4 Proofs | 2 |
| **Review Packet #2** | | | 1 |
| | | **Unit 3 - Similarity & Dilations** | **5** |
| Lesson #17 | CO.A.1<br>SRT.A.1<br>G.N.Q.A.1 | 7-1 Dilations | 1 |
| Lesson #18 | CO.A.1<br>SRT.A.1<br>G.N.Q.A.1<br>SRT.A.2 | 7-2 Similarity Transformations | 1 |
| Lesson #19 | SRT.A.2<br>SRT.B.3 | 7-3 Proving Triangles Similar<br>7-4 Similarity in Right Triangles | 1 |
| Lesson #20 | CO.C.9 | 7-5 Proportions in Triangles | 1 |
| **Review Packet #3** | | | 1 |
| | | **Unit 4 - Trigonometry** | **9** |
| Lesson #21 | SRT.B.3<br>SRT.C.5.a<br>SRT.C.5.b<br>N.Q.A.1 | 8-1 Right Triangles and the Pythagorean Theorem | 1 |
| Lesson #22 | SRT.C.4<br>SRT.C.5.a | 8-2 Trigonometric Ratios<br>● Setting up ratios<br>● Finding sides<br>● Finding angles | 3 |
| Lesson #23 | SRT.C.5.c | 8-3 The Law of Sines | 1 |
| Lesson #24 | SRT.C.5.c | 8-4 The Law of Cosines | 1 |

| Lesson #25 | SRT.C.5.a<br>SRT.C.5.c<br>N.Q.A.1 | 8-5 Problem Solving with Trigonometry | 2 |
|---|---|---|---|
| **Review Packet #4** | | | 1 |
| **Midterms** | | **Review and Midterms** | |
| | | **Spring Benchmark** | |
| | | **Unit 5 - Geometric Properties** | **2** |
| Lesson #26 | GPE.A.2 | 2-4 Slopes of Parallel and Perpendicular Lines | 1 |
| **Review Packet #5** | | | 1 |
| | | **Unit 6 - Circles** | **6** |
| Lesson #27 | C.A.1 | 10-1 Central Angles and Area of Sectors;include circumference and area of circles | 2 |
| Lesson #28 | CO.D.12 | 10-2 Lines Tangent to a Circle | 1 |
| Lesson #29 | CO.C.8 | 10-3 Chords | 1 |
| Lesson #30 | CO.C.8 | 10-4 Inscribed Angles<br>10-5 Secant Lines and Segments | 1 |
| **Review Packet #6** | | | 1 |
| | | **Fall Benchmark** | |
| | | **Unit 7 - Measurement & Dimension; Geometric Modeling** | **5** |
| Lesson #31 | N.Q.A.1<br>GMD.A.1<br>GMD.A.2<br>MG.A.1 | 11-1 Three-Dimensional Figures<br>11-2 Volumes of Prisms and Cylinders<br>TN-1 Surface Area | 1 |
| Lesson #32 | N.Q.A.1<br>GMD.A.1<br>GMD.A.2<br>MG.A.1 | 11-3 Pyramids and Cones<br>11-4 Spheres<br>TN-1 Surface Area | 1 |
| Lesson #33 | N.Q.A.1<br>GMD.A.1<br>GMD.A.2<br>MG.A.1 | Chapter 11 - Composite Volumes and Applications | 1 |
| **Review Packet #7** | | | 2 |
| | | **Unit 8 - Probability** | **3** |
| Lesson #34 | S.CP.A.1<br>S.CP.B.3<br>S.CP.C.4 | 12-1 Probability Events<br>TN - 2 Set Notation | 1 |

| Lesson #35 | S.CP.B.2 | 12-2 Conditional Probability | 1 |
|---|---|---|---|
| Lesson #36 | S.CP.C.4 | TN-3 Finding Probabilities using Geometric Figures | 1 |
| **EOC Practice Test** | All | | 2 |
| **EOC Review** | All | Review topics for EOC | TBD |