

NAME: \_\_\_\_\_ SECTION: \_\_\_\_\_

## GEOMETRY

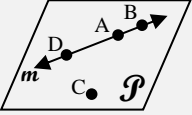
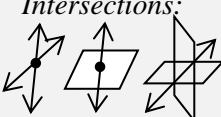
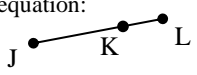
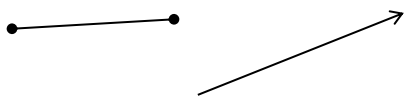
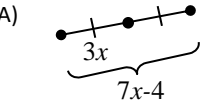
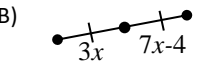
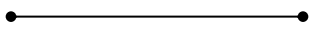
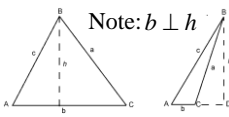
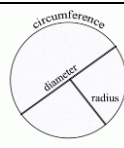
### UNIT 1A: FOUNDATIONS FOR GEOMETRY

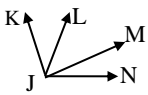
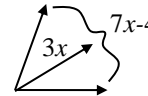
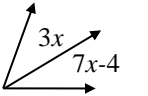
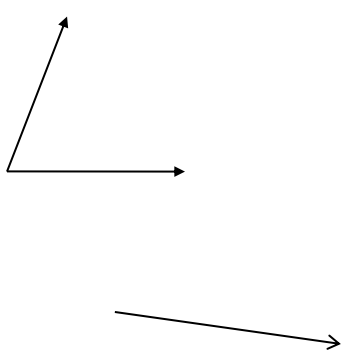
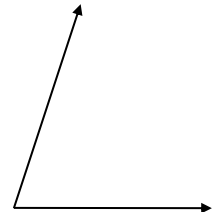
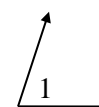
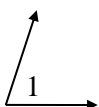
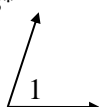
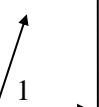
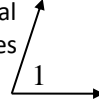
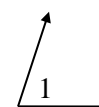
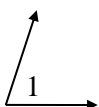
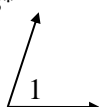
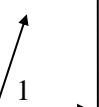
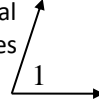
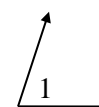
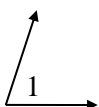
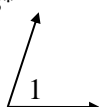
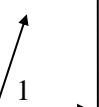
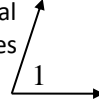
\*\*SHOW ALL WORK\*\*

A COMPASS AND GRAPH PAPER ARE REQUIRED FOR THIS UNIT

LESSON	TOPIC	BOOK/ VIDEO	COMMON CORE STANDARD	ASSIGNMENTS <small>Remember to complete the Lesson Summaries before and after your homework to monitor your understanding and come prepared to class</small>
Day 1	Understanding Points, Lines, and Planes	1-1	G-CO.1	<ul style="list-style-type: none"> <li>• PP. 9-11: #13,14,16-21,23-27,31-34,39,41</li> </ul>
Day 2	Measuring and Constructing Segments	1-2	G-CO.12	<ul style="list-style-type: none"> <li>• PP. 17-18: # 13,14,21,22,24,26, 28,30,35</li> </ul>
Day 3	Segment Bisectors <i>Using patty paper, compass &amp; straight edge</i>	1-2	G-CO.12	<ul style="list-style-type: none"> <li>• PP. 17-18: # 17,18,23,25</li> <li>• WORKSHEET UNIT 1 DAY 3</li> </ul>
Day 4	Using Formulas in Geometry	1-5	G-GPE.7	<ul style="list-style-type: none"> <li>• WORKSHEET UNIT 1 DAY 4</li> </ul>
Day 5	Naming, Measuring and Constructing Angles & Angle Bisectors	1-3	G-CO.12	<ul style="list-style-type: none"> <li>• PP. 25-26: #17,18,28,30-33,38,39,45</li> <li>• WORKSHEET UNIT 1 DAY 5</li> </ul>
Day 6	Pairs of Angles	1-4	G-CO.9	<ul style="list-style-type: none"> <li>• PP 32: #14-22, 32,33,36,37</li> <li>• PP 33 EXTRA CREDIT: #44</li> </ul>
Day 7	QUIZ Sum of Angles at a Point & Consecutive Adjacent Angles on a Line	1-3 1-4	G-CO.9	<ul style="list-style-type: none"> <li>• WORKSHEET UNIT 1 DAY 7</li> </ul>
Day 8	Applications of Basic Construction Skills; Review for Test	1-2 1-3	G-CO.12	<ul style="list-style-type: none"> <li>• WORKSHEET UNIT 1 DAY 8</li> <li>• PP 352: #5,7,12,14,19,21-24</li> </ul>
Day 9	<b>TEST (UNIT 1A)</b>			<ul style="list-style-type: none"> <li>• BRIDGE TO UNIT 2 DUE NEXT CLASS</li> </ul>

GEOMETRY CLASS LESSON SUMMARIES FOR UNIT 1A NAME: \_\_\_\_\_

DAY	MAIN POINTS / FORMULAS TO REMEMBER	QUESTIONS AFTER DOING HOMEWORK
<p><b>1-1</b> Points Lines Planes</p>	 <p>Plane ABC or <math>\mathcal{P}</math> (3 non-collinear pts)</p> <p>Collinear: on (share) same line Coplanar: on (share) same plane</p> <p>Endpoint: <math>\overline{AB}</math> and <math>\overrightarrow{AD}</math> Direction: point the ray passes thru</p> <p>Point: A Segment: <math>\overline{AB}</math> Line: <math>\overleftrightarrow{AB}</math> or <math>m</math> Ray: <math>\overrightarrow{AB}</math></p> <p>Opposite Rays: <math>\overrightarrow{AB}</math> and <math>\overrightarrow{AD}</math> Share an endpoint; make straight line</p> <p>Intersections: </p>	<p>Fill in specific problem number(s) or general question(s) to ask about in class:</p> <p>_____</p>
<p><b>1-2</b></p>	<p>Write the definitions for the following:</p> <ul style="list-style-type: none"> <li>Length: the _____ between the endpoints of a segment.</li> <li>Congruent: two segments that have _____. Ex: If <math>AB=CD</math>, then <math>\overline{AB} \cong \underline{\hspace{1cm}}</math>.</li> <li>Midpoint: a point that _____ a segment into two congruent collinear segments.</li> <li>Segment Bisector: a ray, segment, or line that intersects a segment at its _____.</li> </ul> <p><u>Theorem:</u> Halves of congruent segments are _____.</p> <p>Write the Segment Addition Postulate equation:</p>  <p>Remember to always 1) write the equation 2) substitute 3) solve 4) check!</p> <p>Construct a Congruent Segment on the Ray (Copy a Segment)</p> 	
<p><b>1-3</b></p>	<p>Fill in any missing dimensions with algebraic expressions and write an equation for each midpoint scenario:</p> <p>A) </p> <p>Equation: _____</p> <p>B) </p> <p>Equation: _____</p> <p>Remember to always 1) write the equation 2) substitute 3) solve 4) check!</p>	<p>Construct the Midpoint (Perpendicular Bisector Line):</p> 
<p><b>1-4</b></p>	<p>Perimeter = _____</p> <p>Area<sub>triangle</sub> = _____</p>  <p>Note: <math>b \perp h</math></p> <p>Area<sub>rectangle</sub> = _____</p> <p>Remember to watch for _____ conversions, backsolving for _____ dimensions, and _____ to the required decimal place.</p> <p>For circles, C = _____ A = _____ R = _____ D = _____</p> 	

<p><b>1-5</b></p>	<p>Write the Angle Addition Postulate Equation:</p>  <p>_____</p> <p>_____</p> <p>Fill in any missing dimensions with algebraic expressions and write an equation given the interior ray is an <math>\sphericalangle</math> bisector:</p> <p>C)</p>  <p>Equation: _____</p> <p>D)</p>  <p>Equation: _____</p> <p>Remember to always 1) write the equation 2) substitute 3) solve 4) check!</p> <p><u>Theorem:</u> Halves of _____ angles are congruent.</p>	<p>Construct a Congruent Angle (Copy Angle):</p>  <p>Construct the Angle Bisector:</p> 					
<p><b>1-6</b></p>	<p>Given angle 1, first draw angle 2 such that angles 1 &amp; 2 have the given relationship; then write an equation that relates the angles:</p> <table border="1" data-bbox="276 1008 1250 1239"> <tr> <td data-bbox="276 1008 470 1239"> <p>Adjacent Angles</p>  </td> <td data-bbox="470 1008 665 1239"> <p>Linear Pair</p>  </td> <td data-bbox="665 1008 860 1239"> <p>Complementary Angles*</p>  </td> <td data-bbox="860 1008 1055 1239"> <p>Supplementary Angles*</p>  </td> <td data-bbox="1055 1008 1250 1239"> <p>Vertical Angles</p>  </td> </tr> </table> <p><i>*Answers may be in terms of a variable and do not have to be adjacent!</i></p>	<p>Adjacent Angles</p> 	<p>Linear Pair</p> 	<p>Complementary Angles*</p> 	<p>Supplementary Angles*</p> 	<p>Vertical Angles</p> 	
<p>Adjacent Angles</p> 	<p>Linear Pair</p> 	<p>Complementary Angles*</p> 	<p>Supplementary Angles*</p> 	<p>Vertical Angles</p> 			
<p><b>1-7</b></p>	<p>Draw: Angles at a Point Sum to <math>360^\circ</math></p>	<p>Draw: Consecutive Adjacent Angles on a Line Sum to <math>180^\circ</math></p>					
<p><b>1-8 &amp; Review</b></p>	<p>Identify which of the following basic construction skills A) Copy Segment B) Bisect Segment C) Copy Angle or D) Bisect Angle could be used for each of the following applications:</p> <ol style="list-style-type: none"> <li>1) Isosceles or equilateral triangle given a segment length _____</li> <li>2) Isosceles triangle given a base angle _____</li> <li>3) <math>25^\circ</math> angle given a <math>50^\circ</math> angle _____</li> <li>4) <math>50^\circ</math> angle given a <math>25^\circ</math> angle _____</li> <li>5) A quarter of a given segment length _____</li> <li>6) 5 times a given segment length _____</li> </ol> <ul style="list-style-type: none"> <li>• Constructions may also involve multiple base skills.</li> <li>• Remember that an _____ may also be drawn to a ray of an angle in order to create a linear pair of angles.</li> </ul>						

Warm Up Quizzes

A

1) \_\_\_\_\_

2) \_\_\_\_\_

3) \_\_\_\_\_

4) \_\_\_\_\_

5) \_\_\_\_\_

6) \_\_\_\_\_

7) \_\_\_\_\_

B

$AB + BC = AC$  because \_\_\_\_\_

\_\_\_\_\_

C

$\overline{AM} \cong \underline{\hspace{1cm}}$  because \_\_\_\_\_

\_\_\_\_\_

D

$b = \underline{\hspace{1cm}}$  in feet

$c = \underline{\hspace{1cm}}$  in inches

$h = \underline{\hspace{1cm}}$  in feet

E

\_\_\_\_\_

F

1) \_\_\_\_\_

because \_\_\_\_\_

\_\_\_\_\_

2) \_\_\_\_\_

because \_\_\_\_\_

\_\_\_\_\_

