

Honors Geometry: Properties

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I			M					
District Objective 1. Identify, define, and use the following vocabulary terms: point, line, plane, space, line segment, ray, perpendicular lines, parallel lines, vertical angles, complementary angles, supplementary angles, linear pair, perpendicular bisector, angle bisector, midpoint, congruent, and angles. 2. Identify and use the symbols related to geometry.												PASS Process Standard II A		Quarter I No. Days 3	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 348		
Text Correlation 1.5, 2.1, 2.3							Rating 1		Additional Resources Miras; Practice and Apply 2.4 Postulates Activity; Vertical and Linear Pair; Perpendicular Lines Activity; What Do You Have When You Wind Up A Mummy? Activity; Modeling Intersecting Planes Activity; Geomo Bingo Activity; Card Game Activity						
Assessment 1. Solve: In the figure (not drawn to scale), \vec{MO} bisects $\angle LMN$, $m\angle LMO = 13x - 24$, and $m\angle NMO = x + 84$. Solve for x and find $m\angle LMN$. (a) 5, 33° (b) 9, 186° (c) 9, 141° (d) 5, 41°															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I			M					
District Objective Identify, define, and use vertical angles, complementary angles, supplementary angles, and linear pairs.												PASS Process Standard II A		Quarter I No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning A. Deduce properties and relationships of figures from given assumptions and information to show: 2. Relationships between pairs of angles (e.g., adjacent, complementary , vertical).													NCTM Standard Pgs. 320, 348		
Text Correlation 2.6					Rating		Additional Resources Angel Angles Card Game Activity; Vertical Angles Activity; Angle Pears Card Game Activity;								
Assessment 1. In the figure shown, $m\angle AED = 133$. Which of the following statements is false? (a) $\angle BEC$ and $\angle CED$ are adjacent angles. (b) $\angle AEB$ and $\angle DEC$ are vertical angles. (c) $m\angle AEB = 47$ (d) $m\angle BEC = 47$															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	E	E	E	E	M	M
District Objective Identify and use the point, line and plane postulates.												PASS Process Standard III B, C, D		Quarter I No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...												NCTM Standard Pg. 342			
I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 3. Follow logical arguments															
Text Correlation 2.4							Rating 1		Additional Resources A Puzzle from Games Magazine Activity						
Assessment Decide which one of the following statements is false. (a) Any three points lie on a distinct line. (b) A line contains at least two points. (c) Through any two distinct points there exists exactly one line. (d) Three noncolinear points determine a plane.															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I	M				
District Objective *Use the distance formula to: <ol style="list-style-type: none"> 1. Find the distance between 2 points on a coordinate plane. 2. Determine distance in real-world situations. <i>*Critical to success in next course.</i>											PASS Process Standard		Quarter I No. Days 2		
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry B. Use coordinate geometry to find: <ol style="list-style-type: none"> 1. Distance between two points. 													NCTM Standard Pg. 313		
Text Correlation 2.3				Rating 1		Additional Resources Geometer's Sketchpad; How Big Is My TV? Activity; Measure, Distance and Slope Activity;									
Assessment Towns A , B , and C are connected by the 2 straight highways shown below and can be located using the standard (x, y) coordinate system shown (1 grid unit = 1 mile). How many miles is the trip from A to C along the highways through B ? (a) $4\sqrt{5}$ *(b) $4\sqrt{10}$ (c) $8\sqrt{5}$ (d) $20\sqrt{2}$ (e) 40															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I	M				
District Objective *Find the coordinates of the midpoint of a segment. <i>*Critical to success in next course.</i>												PASS Process Standard II A		Quarter I No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry B. Use coordinate geometry to find: 2. Midpoint of a segment													NCTM Standard Pg. 313		
Text Correlation 1.4								Rating 1		Additional Resources Geometer's Sketchpad; Segment Relationships Activity					
Assessment 1. Find the midpoint of the segment with endpoints $(-6, -6)$ and $(4, 8)$. (a) $(-5, -7)$ bg $(-6, 6)$ (c) $(0, -4)$ (d) $(-1, 1)$ 2. Find the midpoint of the segment shown. (a) $(-1, 5.5)$ (b) $(-1, 6)$ (c) $(-2, 11)$ (d) $(-2, 3)$															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	E	E	E	E	E	M
District Objective Use logical reasoning skills (inductive and deductive) to make and test conjectures .												PASS Process Standard I A III A		Quarter I No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 1. Make and test conjectures													NCTM Standard Pg. 342		
Text Correlation 2.1							Rating 1		Additional Resources Students Making Conjectures Activity; Number Puzzle Activity						
Assessment Use inductive reasoning to predict the next two terms in the pattern.															
1. 4, 8, 12, 16, ... (a) 32, 64 (b) 18, 20 (c) 20, 26 (d) 20, 24															
2. 1, 15, 29, 43, ... (a) 65, 79 (b) 57, 71 (c) 51, 75 (d) 65, 83															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	E	E	E	E	E	M
District Objective Formulate counterexamples.												PASS Process Standard III A, C		Quarter I No. Days 1	
○ ITBS ○ CRT ○ EXPLORE ○ EOI ○ PLAN ○ ACT ○ AP															
PASS Objective The student will... I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 2. Formulate counterexamples												NCTM Standard Pg. 342			
Text Correlation 2.4							Rating 1		Additional Resources Proofs-But No Pizza Activity; Making Conjectures Activity						
Assessment Describe a counterexample that could demonstrate that the statement is false. <ol style="list-style-type: none"> 1. If I got all of my vitamin C, then I drank orange juice. 2. If the car is blue, then it is a Mustang. 3. If snow is falling, then the temperature is below freezing. 															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal									
										I/M														
District Objective Use logical arguments.											PASS Process Standard III A		Quarter I No. Days 4											
○ ITBS ○ CRT ○ EXPLORE ○ EOI ○ PLAN ● ACT ○ AP																								
PASS Objective The student will... I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 3. Follow logical arguments													NCTM Standard Pg. 342											
Text Correlation 2.5, 2.6				Rating 1		Additional Resources Fire Hose Problem Activity; Logic Problem Activity																		
Assessment 1. Complete the proof. Given: $\angle 2 \cong \angle 4$ Prove: $\angle 1 \cong \angle 3$ <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="border-bottom: 1px solid black; width: 30%;">Statements</th> <th style="border-bottom: 1px solid black;">Reasons</th> </tr> </thead> <tbody> <tr> <td>1. $\angle 2 \cong \angle 4$</td> <td>1. Given</td> </tr> <tr> <td>2. $\angle 1 \cong \angle 2$; $\angle 4 \cong \angle 3$</td> <td>2.</td> </tr> <tr> <td>3. $\angle 1 \cong \angle 4$</td> <td>3. Substitution</td> </tr> <tr> <td>4. $\angle 1 \cong \angle 3$</td> <td>4. Transitive</td> </tr> </tbody> </table> <p>(a) transitive property (b) vertical angles are congruent (c) definition of congruent angles (d) substitution</p>															Statements	Reasons	1. $\angle 2 \cong \angle 4$	1. Given	2. $\angle 1 \cong \angle 2$; $\angle 4 \cong \angle 3$	2.	3. $\angle 1 \cong \angle 4$	3. Substitution	4. $\angle 1 \cong \angle 3$	4. Transitive
Statements	Reasons																							
1. $\angle 2 \cong \angle 4$	1. Given																							
2. $\angle 1 \cong \angle 2$; $\angle 4 \cong \angle 3$	2.																							
3. $\angle 1 \cong \angle 4$	3. Substitution																							
4. $\angle 1 \cong \angle 3$	4. Transitive																							

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective Determine truth value of converse, inverse, and contrapositives.												PASS Process Standard III B		Quarter I No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 4. Judge the validity of arguments													NCTM Standard Pg. 342		
Text Correlation 3.3								Rating 1		Additional Resources Negation, Conditional, Converse, Inverse, and Contrapositive Activity/Homework					
Assessment “If the opposite angles of a quadrilateral are congruent, the quadrilateral is a parallelogram.” Is the converse True or False?															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I			M					
District Objective <ol style="list-style-type: none"> 1. Identify pairs of angles formed by transversals and parallel lines. 2. Find the measures of angles formed by transversals and lines 3. Analyze real-world examples of intersecting lines and parallel lines. 4. Use facts about lines to prove parallel lines exist. 												PASS Process Standard		Quarter I No. Days 5	
<input type="radio"/> ITBS <input type="radio"/> CRT <input checked="" type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning <ol style="list-style-type: none"> A. Deduce properties and relationships of figures from given assumptions and information to show: <ol style="list-style-type: none"> 1. Relationships of parallel lines with a transversal. 												NCTM Standard Pg. 342			
Text Correlation 3.5, 3.6							Rating 1		Additional Resources Lines, Transversals, and Special Angle Pairs Review Activity; Angles and Transversals Activity; Parallel Lines 1 & 2 Activity						
Assessment <ol style="list-style-type: none"> 1. Lines m and n below are parallel, and lines x and y are transversals. What is the value of α ? <ol style="list-style-type: none"> (a) 60° (b) 70° * (c) 80° (d) 100° (e) 110° 															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I			M					
District Objective Classify, identify, and measure types of angles and angle pairs (acute, obtuse, right, complementary, supplementary, adjacent, vertical, linear pairs, and perpendicular)												PASS Process Standard II C		Quarter I No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input checked="" type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning A. Deduce properties and relationships of figures from given assumptions and information of show: 2. Relationships between pairs of angles (e.g., adjacent, complementary , vertical).												NCTM Standard Pgs. 308, 320, 342			
Text Correlation 2.1, 2.6							Rating 1		Additional Resources I Have-Who Has Card Game Activity						
Assessment Find the measure of a complementary angle, supplementary angle and a vertical angle for a 97° angle. (a) 3, 83, 97 (b) -7 , 83, 83 (c) none, 97, 83 (d) none, 83, 97															

Honors Geometry: Data Analysis, Statistics and Probability																																						
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal																							
									I	E	E	M																										
District Objective Collect data involving two variables and display on a scatter plot ; interpret results using a linear model.												PASS Process Standard IV A, D		Quarter I No. Days 1																								
○ ITBS ○ CRT ○ EXPLORE ○ EOI ○ PLAN ○ ACT ○ AP																																						
PASS Objective The student will... V. Data Analysis, Statistics, and Probability A. Collect data involving two variables and display on a scatter plot ; interpret results using a linear or quadratic model/equation and identify whether the model/equation is a curve of best fit for the data (e.g., given a scatter plot and several linear or quadratic equations, which one is the best fit?).													NCTM Standard																									
Text Correlation 2.6, Pg. 94								Rating 3		Additional Resources Height and Age Scatter Plot Activity																												
Assessment 1. Copy and complete the table. Angle 1 and Angle 2 are complementary.																																						
<table border="1"> <tr> <td>$m\angle 1$</td> <td>1°</td> <td>10°</td> <td>20°</td> <td>30°</td> <td>40°</td> <td>50°</td> <td>60°</td> <td>70°</td> <td>80°</td> <td>90°</td> </tr> <tr> <td>$m\angle 2$</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> <td>?</td> </tr> </table>																	$m\angle 1$	1°	10°	20°	30°	40°	50°	60°	70°	80°	90°	$m\angle 2$?	?	?	?	?	?	?	?	?	?
$m\angle 1$	1°	10°	20°	30°	40°	50°	60°	70°	80°	90°																												
$m\angle 2$?	?	?	?	?	?	?	?	?	?																												
2. Construct a scatter plot for the data in the table. Let $x = m\angle 1$ and let $y = m\angle 2$. Write an equation that relates x and y .																																						

Honors Geometry: Data Analysis, Statistics and Probability																
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
										I	E	M				
District Objective Use the Fundamental Counting Principle to solve problems (e.g., find the possible ways to label the vertices of a polygon).												PASS Process Standard		Quarter I No. Days 1		
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP																
PASS Objective The student will...														NCTM Standard Pgs. 297, 324, 360		
V. Data Analysis, Statistics, and Probability D. Use the Fundamental Counting Principle to solve problems (e.g., find the possible ways to label the vertices of a polygon).																
Text Correlation				Rating		Additional Resources Fundamental Counting Principle Activity										
Assessment																
<p>Xavier and Yolanda have a total of 20 \$1 bills. All of the possible ways to divide the 20 bills between Xavier and Yolanda are graphed below. If Xavier must have an even number of \$1 bills, how many possible numbers of \$1 bills are there for Yolanda to have?</p> <p>(Note: Zero is an even number.)</p> <p>(a) 2 (b) 10 *(c) 11 (d) 20 (e) 21</p>																

Honors Geometry: Data Analysis, Statistics and Probability															
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
								I	E	E	E	E	M		
District Objective Use data and statistical measures for a variety of purposes (e.g., formulate hypotheses, make predictions, test conjectures).											PASS Process Standard II A		Quarter I No. Days 2		
○ ITBS ○ CRT ○ EXPLORE ○ EOI ● PLAN ● ACT ○ AP															
PASS Objective The student will... V. Data Analysis, Statistics, and Probability B. Use data and statistical measures for a variety of purposes (e.g., formulate hypotheses, make predictions, test conjectures).													NCTM Standard Pgs. 324, 334, 342, 348		
Text Correlation 2.6, 3.3				Rating 1		Additional Resources Enrichment Projects (Heath) - Pg. 48 (8.1)									
Assessment 1. Greg is buying soft drinks for a class party. He discovers that one case of drinks costs \$5.31. However, if he buys 20 or more cases, he will get a 20% discount. A reasonable conclusion about the price for 20 cases is that it would be: (a) less than \$80 (b) more than \$100 (c) between \$90 and \$100 (d) between \$80 and \$90 2. Isabel is taller than Ellen. Ellen is shorter than Janina. Jimmy is taller than Isabel. Which of the following is a reasonable conclusion? (a) Janina is shorter than Ellen. (b) Jimmy is taller than Ellen. (c) Isabel is the tallest. (d) Jimmy is the shortest.															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I					
District Objective Validate an argument through simple proof techniques (i.e., 2 column, flow, paragraph proofs).												PASS Process Standard II A, B III A, B D		Quarter I No. Days	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... I. Logical Reasoning C. Use logical reasoning skills (inductive and deductive) to: 5. Construct simple valid arguments													NCTM Standard Pg. 342		
Text Correlation 3.4								Rating 1		Additional Resources Common Errors Made on Proofs Reference Sheet					
Assessment 1. Write the reason for each step in the flow proof. Given: $CD = CE$ $EF = BC$ Prove: $BD = CF$ 2. Write a paragraph proof. Given: $\overline{PR} \cong \overline{LN}$ Q is the midpoint of \overline{PR} M is the midpoint of \overline{LN} Prove: $PQ = LM$															

Honors Geometry: Angles and Triangles																
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
										I/M						
District Objective Solve problems using properties of angles (e.g., interior, exterior, complementary, vertical, angle sums).											PASS Process Standard		Quarter II No. Days 1			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																
PASS Objective The student will... IV. Angles and Triangles A. Solve problems using properties of angles (e.g., interior, exterior, complementary, vertical, angle sums).													NCTM Standard Pgs. 308, 334			
Text Correlation 4.1, 4.2					Rating 1		Additional Resources Angles of a Triangle Activity; Angles of Special Triangles Activity; Sum of the Angles of a Triangle Activity; Angles of Polygons Activity; Polygons Made Simple Activity									
Assessment If one angle in a triangle measures 18° and another measures 36° , what is the measure of the third angle? (a) 36° (b) 46° (c) 54° *(d) 126° (e) 144°																

Honors Geometry: Triangle Properties

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E		M					
District Objective 1. Apply the Isosceles Triangle Theorem and its converse. 2. Find measures of isosceles triangles.												PASS Process Standard		Quarter II No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 308		
Text Correlation 4.6							Rating 1		Additional Resources Enrichment Projects (Heath), Pg. 19 (4.1); Isosceles Triangle Activity						
Assessment 1. Given $m\angle TUV = 100^\circ$ and $m\angle UTV = 80^\circ$, find $\angle TVU$. (a) $\angle TVU = 100^\circ$ (b) $\angle TVU = 140^\circ$ (c) $\angle TVU = 88^\circ$ (d) $\angle TVU = 120^\circ$															

Honors Geometry: Angles and Triangles

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
								I		M					
District Objective Use properties of right triangles to solve problems in geometry (e.g., use Hypotenuse-Leg to prove congruent triangles).												PASS Process Standard III A, B, C, D		Quarter II No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... IV. Angles and Triangles A. Solve problems using properties of angles (e.g., interior, exterior, complementary , vertical, angle sums, 30-60-90).												NCTM Standard Pg. 342			
Text Correlation 4.6								Rating 1		Additional Resources The Angles of a Triangle Activity					
Assessment State the theorem that verifies that $\triangle RST \cong \triangle WYX$.															

Honors Geometry: Triangle Properties

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective 1. Identify and draw medians, altitudes and bisectors of triangles. 2. Use the properties of medians, altitudes and bisectors in triangles.												PASS Process Standard		Quarter II No. Days 4	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 308		
Text Correlation 5.1, 5.2								Rating 1		Additional Resources Altitudes of Triangles, Parallelograms; Altitudes and Orthocenters; Altitudes of Trapezoids; Perpendicular Bisector; Perpendicular Bisectors, Circumcenters and Circumcircles; Angle Bisectors; Angle Bisectors: Triangles and Inscribed Circles Activities					
Assessment 1. Name a median for $\triangle RST$. (a) \overline{RW} (b) \overline{SU} (c) \overline{TV} (d) \overline{RS} 2. Find an equation of the line that contains the altitude to \overline{LN} (a) $y = -\frac{1}{9}x - \frac{17}{9}$ (b) $y = \frac{1}{9}x + \frac{28}{9}$ (c) $y = -9x + 7$ (d) $y = 9x - 11$															

Honors Geometry: Angles and Triangles

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E					
District Objective 1. Identify and construct the midsegments of a triangle. 2. Use properties of midsegments to solve real-life problems.												PASS Process Standard I A IV D V A		Quarter II No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry B. Use coordinate geometry to find: 2. Midpoint of a segment 3. Slopes of parallel, perpendicular, horizontal, and vertical lines													NCTM Standard Pg. 308		
Text Correlation 5.3								Rating 1		Additional Resources Geometer's Sketchpad					
Assessment For the triangle shown, $VS = 5$ and $VQ = 6$. Then $PQ = ?$ (a) 11 (b) 10 (c) 12 (d) 5															

Honors Geometry: Angles and Triangles																		
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal			
										I/E								
District Objective 1. State and apply inequality relations for one triangle. 2. State and apply the Triangle Inequality Theorem.											PASS Process Standard IV D		Quarter II No. Days 1					
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																		
PASS Objective The student will...													NCTM Standard Pgs. 296, 308					
Text Correlation 5.4				Rating 1		Additional Resources GeoStrips; Geometer's Sketchpad												
Assessment 1. Using the Triangle Inequality Theorem, solve for all possible values of x . (a) $x < \frac{1}{4}$ (b) $x > \frac{1}{2}$ (c) $x < \frac{1}{2}$ (d) $x > \frac{1}{4}$ 2. Solve the inequality $AB + AC > BC$.																		

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	M					
District Objective Identify, name, classify and draw polygons.												PASS Process Standard II A		Quarter II No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures A. Draw and analyze 2- and 3-dimensional figures.													NCTM Standard Pg. 308		
Text Correlation 6.1							Rating 1		Additional Resources Geoboards (Overhead); Polygons (Your Own Mind) Activity; http://aaamath.com/geo318-polygons-sides.html						
Assessment 1. Sketch a convex polygon which has at least four sides. 2. Sketch a polygon which is not convex. 3. Define regular polygon. Sketch an example.															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I/M							
District Objective Find the measure of the interior and exterior angles of convex polygons.												PASS Process Standard V B		Quarter II No. Days 2			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures B. Use properties of 2- and 3-dimensional figures to determine unknown values (e.g., given the perimeter/circumference, find the area).												NCTM Standard Pgs. 308, 320					
Text Correlation 6.2						Rating 1		Additional Resources Geoboards; Interior Angle Sums on Polygons Activity; Angle Measures in Polygons Activity; Sum of Interior Angles Activity									
Assessment For each of the figures below, S represents the sum of the measures of the interior angles. Study the given information, then find S for a fourteen-sided polygon.																	
3 sides 1 triangle $S = 180^\circ$				4 sides 2 triangles $S = 360^\circ$				6 sides 4 triangles $S = 720^\circ$									
(a) 2520°				(b) 2160°				(c) 2340°				(d) 1980°					

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E					
District Objective 1. Apply the definition of a parallelogram. 2. Prove and apply theorems relating parallelograms and their properties.												PASS Process Standard II A		Quarter II No. Days 3	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures A. Draw and analyze 2- and 3-dimensional figures.													NCTM Standard Pg. 308		
Text Correlation 6.3, 6.4							Rating 1		Additional Resources Verifying That Certain Quadrilaterals are Parallelograms Activity; Parallelogram Properties Activity; Placing a Parallelogram on a Coordinate Plane Activity						
Assessment 1. Choose the statement that is <i>not always</i> true. For any parallelogram: (a) opposite sides are congruent (b) opposite angles are congruent (c) the diagonals are perpendicular (d) the diagonals bisect each other 2. For parallelogram $PQLM$, if $m\angle PML = 83^\circ$, then $m\angle PQL = ?$ (a) 83° (b) 97° (c) $m\angle PQM$ (d) $m\angle QLM$															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective Identify and apply special properties of a rectangle, rhombus, and square.												PASS Process Standard II C III A, C		Quarter II No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 308		
Text Correlation 6.5								Rating 1		Additional Resources Diagonals of a Rhombus are Perpendicular (But Not Necessarily Equal) Activity; The Golden Ratio Activity					
Assessment 1. Select the geometric figure that possesses all of the following characteristics: <ul style="list-style-type: none"> i. quadrilateral ii. diagonals equal iii. opposite sides are parallel (a) trapezoid (b) parallelogram (c) rhombus (d) rectangle															
2. In rhombus $ABCD$, $AB = 20$ and $AC = 23$. Find BD to the nearest tenth. (a) 32.7 (b) 42.9 (c) 30.4 (d) 22.7															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
							I			M							
District Objective Apply the definition of and properties of a trapezoid. (Midsegment Theorem)												PASS Process Standard II C III A, C		Quarter II No. Days 1			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will...													NCTM Standard Pg. 308				
Text Correlation 6.6							Rating 1		Additional Resources The Diagonals of Quadrilaterals Activity; The Trapezoid Activity								
Assessment 1. In trapezoid $ABCD$ pictured below, \overline{AD} is parallel to \overline{BC} , and diagonals \overline{AC} and \overline{BD} intersect at E. The measure of $\angle ABC$ is 130° , and the measures of other distances (in centimeters) and angles are as marked. What is the length of diagonal \overline{AC} , in centimeters? (a) 36 (b) 12 (c) $2\sqrt{30}$ (d) $4\sqrt{3}$ *(e) $8\sqrt{3}$ 2. For the trapezoid shown, the measure of the midsegment is ? (a) 25 (b) 30 (c) 58 (d) 29																	

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective Given a set of points determine the type of figure based on its properties (e.g., parallelogram, isosceles triangle, regular octagon).												PASS Process Standard I B		Quarter II No. Days 3	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry C. Given a set of points determine the type of figure based on its properties (e.g., parallelogram, isosceles triangle, regular octagon).													NCTM Standard Pg. 308		
Text Correlation 6.3, 6.4, 6.5, 6.6						Rating 1		Additional Resources Geometer's Sketchpad http://aaamath.com/geo318-polygons-numbers.html							
Assessment 1. A rectangle in the standard (x, y) coordinate plane has vertices at $(0, 0)$, $(4, 0)$, and $(0, -2)$. What are the coordinates of the fourth vertex? (a) 4 , -2g (b) 4 , 0g (c) 0 2g *(d) 4 -2g (e) 4 2g 2. In the standard (x, y) coordinate plane, straight line segments are drawn between the following pairs of points. $(0, 0)$ and $(2, 2)$ $(2, 2)$ and $(4, 0)$ $(4, 0)$ and $(2, 0)$ $(2, 0)$ and $(0, 0)$ What shape is formed by these line segments? *(a) Triangle (b) Square (c) Trapezoid (d) Pentagon (e) Hexagon															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I					
District Objective 1. Find the coordinates of a polygon reflected over the x -axis, the y -axis, or the line $y = x$. 2. Describe how coordinates change after reflections. 3. Explore situations involving reflections that can be modeled on a coordinate plane.												PASS Process Standard III A IV A, B, D	Quarter III No. Days 1		
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry A. Use transformations (reflection, rotation, translation) within coordinate geometry (e.g., reflect points across the y -axis).												NCTM Standard Pg. 308			
Text Correlation 7.1, 7.2				Rating 1		Additional Resources Geometer's Sketchpad; Reflecting a Polygon Over a Line Activity; Reflections and Turns, Reflections and Slides, Repeated Reflections, Reflection Images: Isometric Dot Paper, Flip (Reflection) Images, Reflection Images: Dot Paper Activities									
Assessment Which graph represents a reflection in the x -axis? <div style="display: flex; justify-content: space-around;"> (a) (b) </div> <div style="display: flex; justify-content: space-around;"> (c) (d) </div>															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E					
District Objective 1. Rotate a figure around a center of rotation. 2. Find the coordinates of the vertices of a polygon that has been rotated around the origin. 3. Describe rotations of real-world objects.												PASS Process Standard III A IV A, B, D		Quarter III No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry A. Use transformations (reflection, rotation, translation) within coordinate geometry (e.g., reflect points across the y-axis).													NCTM Standard Pg. 308		
Text Correlation 7.3								Rating 1		Additional Resources Geometer's Sketchpad; Transformations Activity; Symmetry in Snowflakes Activity					
Assessment Identify the coordinates of the point (3, 7) after a rotation of 180° clockwise around the origin. (a) $3, -7$ (b) $3, 7$ (c) $3, 3$ (d) $3, -7$															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E					
District Objective 1. Find the coordinates of the image of a figure after a translation. 2. Describe a translation based on an original figure and its image. 3. Describe patterns that involve translation.												PASS Process Standard III A IV, A, B, D		Quarter III No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry A. Use transformations (reflection, rotation, translation) within coordinate geometry (e.g., reflect points across the y-axis).													NCTM Standard Pg. 308		
Text Correlation 7.4			Rating 1		Additional Resources Geometer's Sketchpad; Crossword Puzzle Activity http://www.ucs.mun.ca/~mathed/Geometry/Transformations/Transformations.html http://www.nku.edu/~foletta/Translation.html										
Assessment What is the translation image of (2, 5) after the translation $(x, y) \rightarrow (x - 3, y + 1)$? (a) (1, 4) (b) (5, 6) (c) (5, 4) (d) (1, 6)															

Honors Geometry: Coordinate Geometry

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E					
District Objective 1. Combine a translation and a reflection to form a glide reflection. 2. Find the image of a figure after a glide reflection. 3. Identify, describe, and create patterns that use glide reflections.												PASS Process Standard III A IV A, B, D		Quarter III No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... III. Coordinate Geometry A. Use transformations (reflection, rotation, translation) within coordinate geometry (e.g., reflect points across the y -axis).													NCTM Standard Pg. 308		
Text Correlation 7.5								Rating 1		Additional Resources Geometer's Sketchpad; The Transformation Game Activity					
Assessment Which of the following shows the image of $\triangle ABC$ after the glide reflection $b, b \rightarrow b-6, b-3$ over the line $y = -1$? <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;"> <p>(a)</p> </div> <div style="text-align: center;"> <p>(b)</p> </div> <div style="text-align: center;"> <p>(c)</p> </div> <div style="text-align: center;"> <p>(d)</p> </div> </div>															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	M					
District Objective											PASS Process Standard II A		Quarter III No. Days 1		
1. Express a ratio in simplest form. 2. Identify, write and solve problems.															
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective												NCTM Standard Pgs. 296, 308			
The student will...															
Text Correlation				Rating		Additional Resources									
8.1				1		Using Photo Images to Bring Real World Situations Into Your Classroom Activity									
Assessment															
1. If $\frac{3}{x-4} = \frac{7}{x}$, then ?															
(a) $x = 3$ (b) $x = 4$ (c) $x = 7$ (d) $x = \frac{7}{3}$															
2. According to a recent survey, 20 out of every 25 students do not walk to school. Which of the following represents the ratio of walkers to total students?															
(a) $\frac{4}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{5}$ (d) 5															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	E	M				
District Objective Express a given proportion in an equivalent form.												PASS Process Standard II A IV A, B		Quarter III No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 296		
Text Correlation 8.1, 8.2, 8.3							Rating 1		Additional Resources Finding the Unknown Height of Objects Activity; Grading Rubric: Height Project Activity						
Assessment Assume the exchange rate of Canadian dollars to American dollars is 1 to 0.77. If a stove costs \$529.50 in Canada dollars, then what would its price be in American dollars? (a) \$407.72 (b) \$687.66 (c) \$452.50 (d) \$506.50															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective Find the geometric mean between two numbers.												PASS Process Standard II A		Quarter III No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pgs. 296, 308		
Text Correlation 8.2, 9.1								Rating 2		Additional Resources					
Assessment 1. Find the geometric mean of 8 and 2. 2. Given the relationship of three gears whose ratios are Gear <i>A</i> to Gear <i>B</i> is equal to the ratio of Gear <i>B</i> to Gear <i>C</i> , find Gear <i>A</i> given Gear <i>B</i> :20 teeth, Gear <i>C</i> : 25 teeth.															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective Identify and apply the properties of similar polygons.												PASS Process Standard II A		Quarter III No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...												NCTM Standard Pg. 308			
Text Correlation 8.3						Rating 1		Additional Resources Congruent Polygons and Corresponding Points Activity; Similar Polygons Activity; Test for Similarity Activity							
Assessment															
1. If two polygons are similar, then their corresponding sides must be ? (a) parallel (b) proportional (c) similar (d) congruent															
2. One standard photograph size is a 4 in. × 5 in. rectangle. Which of these other standard rectangular sizes is similar to it? (a) $2\frac{1}{2}$ in. × $3\frac{1}{2}$ in. (b) 5 in. × 7 in. (c) 8 in. × 10 in. (d) 11 in. × 14 in.															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective 1. State and use AA Postulate to prove triangles similar. 2. Deduce information about segments and angles by first proving two triangles similar.												PASS Process Standard III B, C		Quarter III No. Days 3	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pgs. 308, 342		
Text Correlation 8.4								Rating 1		Additional Resources Enrichment Projects-Teacher Resource Manual; Making an Enlargement Activity					
Assessment Which triangle is <i>not</i> similar to any of the others? (a) (b) (c) (d)															

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I/M							
District Objective Use the SAS and SSS Theorems to prove two triangles similar.												PASS Process Standard II B, C		Quarter III No. Days 2			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will...													NCTM Standard Pgs. 308, 342				
Text Correlation 8.5							Rating 1		Additional Resources								
Assessment Shown at the right is an illustration of the ? (a) AA Similarity Postulate (b) SAS Similarity Postulate (c) SSS Similarity Theorem (d) SAS Congruence Theorem																	

Honors Geometry: Logical Reasoning

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I/E							
District Objective Prove and apply the Triangle Proportionality Theorem and its related theorems.												PASS Process Standard II B, C		Quarter III No. Days 2			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will...													NCTM Standard Pgs. 308, 342				
Text Correlation 8.6						Rating 1		Additional Resources									
Assessment Find the value of x to one decimal place. (a) 19.0 (b) 2.21 (c) 0.53 (d) 22.5																	

Honors Geometry: Angles and Triangles

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I/M							
District Objective State and apply the relationships that exist when the altitude is drawn to the hypotenuse of a right triangle.												PASS Process Standard II B III A		Quarter III No. Days 2			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will...													NCTM Standard Pg. 308				
Text Correlation 9.1							Rating 1		Additional Resources Altitude to the Hypotenuse of a Right Triangle Model Activity								
Assessment Find the length of the altitude, x .																	

Honors Geometry: Angles and Triangles

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/M					
District Objective 1. Use the Pythagorean Theorem and its converse to find missing side lengths and to determine acute, right, and obtuse angles. 2. Identify Pythagorean triples.												PASS Process Standard		Quarter III No. Days 4	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... IV. Angles and Triangles B. Use the Pythagorean Theorem and its converse to find missing side lengths and to determine acute, right, and obtuse triangles.												NCTM Standard Pgs. 296, 308			
Text Correlation 9.2, 9.3								Rating 1		Additional Resources Geometer's Sketchpad; Enrichment Projects (Heath); The Pythagorean Theorem Activity; Right Triangle Rule Activity					
Assessment 1. Find the measure, to the nearest tenth, of the diagonal of a rectangle with dimensions 19 cm by 16 cm. (a) 10.2 cm (b) 1.7 cm (c) 24.8 cm (d) 5.9 cm 2. Which set of side lengths cannot form a right triangle? (a) $\frac{5}{2}$ mm, 6mm, $\frac{13}{2}$ mm (b) 10 mm, 24 mm, 26 mm (c) 6 mm, 12 mm, 12 mm (d) 5 mm, 12 mm, 13 mm 3. Tell whether the triangle with sides given is right, obtuse, or acute. 13, 8, 18 (a) Right (b) Acute (c) Obtuse (d) Not a triangle															

Honors Geometry: Angles and Triangles																		
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal			
										I/M								
District Objective 1. Apply properties of 30-60-90, 45-45-90, similar, and congruent triangles.											PASS Process Standard		Quarter III No. Days 3					
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																		
PASS Objective The student will...													NCTM Standard Pgs. 296, 308					
IV. Angles and Triangles A. Solve problems using properties of angles (e.g., interior, exterior, complementary, vertical, angle sums, 30-60-90).																		
Text Correlation 9.4					Rating 1		Additional Resources Geo War! Activity											
Assessment																		
1. In a $30^\circ - 60^\circ - 90^\circ$ triangle, the ratio of the length of the hypotenuse to the length of the shorter side is ? (a) $\sqrt{3}:1$ (b) $\sqrt{2}:1$ (c) $2:\sqrt{3}$ (d) $2:1$																		
2. In a $45^\circ - 45^\circ - 90^\circ$ triangle, the ratio of the length of the hypotenuse to the length of a side is ? (a) $\sqrt{3}:1$ (b) $\sqrt{2}:1$ (c) $1:1$ (d) $2:1$																		

Honors Geometry: Angles and Triangles

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I		M					
District Objective Express the trigonometric functions as ratios and derive the relationship between sine , cosine , and tangent ratios , and use to solve real-world problems.												PASS Process Standard IV C		Quarter III No. Days 7			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will... IV. Angles and Triangles C. Express the trigonometric functions as ratios and derive the relationship between sine , cosine , and tangent ratios , and use to solve real-world problems.												NCTM Standard Pgs. 296, 308					
Text Correlation 9.5, 9.6						Rating 1		Additional Resources Finding the Tangent of an Acute Angle of a Right Triangle Activity; Finding the Lengths of Sides of Right Triangles Activity									
Assessment 1. From the time it takes a radar signal to bounce back from a plane, Air Traffic Control's radar can determine the distance, d , of the plane from the radar dish. The angle, a° , that the plane makes with the horizontal, as shown below, can also be determined from the radar signal. From this information, a computer must determine the elevation of the plane above the level of the radar dish. Which of the following expressions gives this altitude? *(a) $d \sin a^\circ$ (b) $d \cos a^\circ$ (c) $d \tan a^\circ$ (d) $d \cot a^\circ$ (e) $d \sec a^\circ$ 2. In the figure below, $\angle B$ is a right angle and other measures are marked. What is $\tan x$? (a) $\frac{15}{8}$ *(b) $\frac{8}{15}$ (c) $\frac{8}{17}$ (d) $\frac{15}{17}$ (e) $\frac{17}{15}$																	

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E		M					
District Objective Define a circle and its related terms.												PASS Process Standard II A		Quarter IV No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...												NCTM Standard Pg. 308			
Text Correlation 10.1						Rating 1		Additional Resources Circle Quiz Activity http://www.mathgoodies.com/lessons/vol2/circumference.html							
Assessment															
<p>1. A circle is a set of all points in a plane that ? (a) have a center (b) lie within a given radius (c) are equidistant from a given point (d) have a diameter</p> <p>2. A segment whose endpoints are on a circle is a ? (a) tangent (b) chord (c) radius (d) secant</p> <p>3. The center of a circle lies on ? (a) the circle (b) every chord (c) a tangent line (d) every diameter</p> <p>4. If a circle has a diameter of 12, then it has ? (a) a radius of 24 (b) a radius of 4 (c) a diameter of 6 (d) a radius of 6</p> <p>5. A line which intersects a circle at exactly one point is called? (a) a tangent of the circle (b) a secant of the circle (c) the point of tangency (d) a chord</p> <p>6. Two circles are concentric if ? (a) they have exactly one point of intersection (b) they have congruent radii (c) they have no points of intersection (d) they have the same center</p>															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E		M		M	
District Objective Apply theorems relating tangents and radii and theorems about chords of a circle.												PASS Process Standard II A		Quarter IV No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pgs. 308, 320		
Text Correlation 10.2							Rating 1		Additional Resources Constructions-B Activity; Circle Exploration and Construction Activity						
Assessment Use the figure below and the given information. Given: \overline{SR} is tangent to circle Q at R . 1. Choose the true statement. (a) $m\angle RQS = 90^\circ$ (b) $\overline{SQ} \cong \overline{SR}$ (c) $m\angle SRQ = 90^\circ$ (d) $m\angle RQS + m\angle QSR = 180^\circ$ 2. $SR = ?$ (a) 24 (b) $\sqrt{764}$ (c) $\sqrt{674}$ (d) $\sqrt{567}$															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E		M		M	
District Objective Define and apply properties of arcs and central angles.												PASS Process Standard II A		Quarter IV No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures E. Find angle measures and arc measures related to circles.													NCTM Standard Pgs. 308, 320		
Text Correlation 10.3								Rating 1		Additional Resources An Investigation: Central Angles and Inscribed Angles Activity					
Assessment 1. In the circle below, diameters \overline{AE} , \overline{BF} , \overline{CG} , and \overline{DH} intersect at P . The 4 angles marked have the same measure of x° . What is the measure of $\angle DPE$? (a) $12\frac{1}{2}^\circ$ (b) $22\frac{1}{2}^\circ$ *(c) 45° (d) 72° (e) 90°															
2. In the circle centered at C below, \overline{AB} is a diameter, and D lies on the circle. If the measure of $\angle ACD$ is 60° , what is the measure of $\angle ABD$? (a) 15° *(b) 30° (c) 40° (d) 45° (e) 60°															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal		
										I				M			
District Objective Solve problems relating to inscribed angles and angles formed by chords, secants, and tangents.												PASS Process Standard II A		Quarter IV No. Days 4			
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																	
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures E. Find angle measures and arc measures related to circles.													NCTM Standard Pgs. 308, 320				
Text Correlation 10.4, 10.5, 10.6							Rating 1		Additional Resources Circle Activity; Inscribed Angles That Intercept the Diameter Activity								
Assessment 1. Write an equation that can be used to solve for x . Then solve the equation for x . 2. Find the measure of $\angle 1$. 3. Find $m\angle ABD$ and $m\angle ACD$.																	

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	M					
District Objective Compute the perimeter and area of polygons.											PASS Process Standard IV A, B, C, D		Quarter IV No. Days 6		
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...												NCTM Standard Pgs. 308, 320			
II. Properties of 2- and 3-Dimensional Figures B. Use properties of 2- and 3-dimensional figures to determine unknown values (e.g., given the perimeter/circumference, find the area). C. Compute length, perimeter/circumference, area, volume , and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.															
Text Correlation 11.1, 11.2, 11.3, 11.4		Rating 1		Additional Resources Geoboards; Tasmanian Devil-“The Hero” Activity; Floor Plans Activity; Paper Folding Activity; Area of a Triangle Activity; Area of a Parallelogram Activity; Perimeter and Area of Polygons Activity; Parallelograms Activity; Word Problems Activity; Pattern Blocks Activities (2); http://practice.satmath.com/sat1/tutorial/section13/p1.html											
Assessment															
1. The out - of - bounds lines around a basketball court in Central Park need to be repainted. The court is a rectangle 90 feet long and 50 feet wide. What is its perimeter, in feet? (a) 140 (b) 190 (c) 230 *(d) 280 (e) 4,500															
2. The area of a parallelogram can be found by using the formula $A = bh$, where A is the area, b is the length of the base, and h is the height of the parallelogram. What is the area, in square inches, of $\triangle PQX$ below if the area of parallelogram $PQRS$ is 28 square inches? (Note: Lengths on the diagram are expressed in inches.) (a) 21 (b) 17.5 *(c) 14 (d) 13 (e) 12															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	M					
District Objective Compute the area and circumference of circles, compute arc length and area of sector and segment.												PASS Process Standard IV A, B, C, D		Quarter IV No. Days 4	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures B. Use properties of 2- and 3-dimensional figures to determine unknown values (e.g., given the perimeter/circumference, find the area). C. Compute length, perimeter/circumference, area, volume , and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.													NCTM Standard Pgs. 308, 320		
Text Correlation 11.5, 11.6							Rating 1		Additional Resources Geoboards; Which Cookie is a Better Buy? Activity						
Assessment 1. What is the area of a circle in the standard (x, y) coordinate plane whose center is $(0, 0)$ and whose x -intercepts are $(-3, 0)$ and $(3, 0)$? (a) 3π (b) 6π *(c) 9π (d) $9\pi^2$ (e) 36π 2. The radius of the circle is $\sqrt{2}$. The distance from the center of the circle to the chord is 1. If the measure of AB is 90° , the area of the shaded segment is ? (a) $(\frac{\pi}{2}-1)$ units ² (b) $(2\pi-1)$ units ² (c) $\frac{\pi}{4}$ units ² (d) $\frac{2}{3}$ units ² 3. Find the length of a 40° -arc in a circle with radius of 4. (a) $\frac{9\pi}{8}$ (b) 8π (c) $\frac{16\pi}{9}$ (d) $\frac{8\pi}{9}$															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E				M	
District Objective State and apply the relationships between scale factors, perimeters, and the areas of similar figures.												PASS Process Standard IV A, D		Quarter IV No. Days 1	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...														NCTM Standard Pg. 308	
I. Logical Reasoning B. Determine and use the relationships of congruency and similarity to determine unknown values. II. Properties of 2- and 3-Dimensional Figures C. Compute length, perimeter/circumference, area, volume, and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.															
Text Correlation 11.7				Rating 1		Additional Resources Designer/(C.A.D.) Operator Activity; Scale Drawings Activity; Ratio Puzzles with Triangles Activity									
Assessment															
<p>1. If the lengths of the sides of one triangle are 8 inches, 10 inches, and 12 inches, respectively, what is the perimeter, in inches, of a similar triangle whose longest side is 4 inches?</p> <p style="text-align: center;">(a) 90 (b) 30 (c) 15 (d) 12 (e) 10</p> <p>2. The ratio of the side lengths of two regular hexagons is 4 to 9. If the area of the smaller hexagon is 16 units², then the area of the larger hexagon is ?</p> <p style="text-align: center;">(a) 36 units² (b) 81 units² (c) $\frac{64}{9}$ units² (d) $\frac{256}{81}$ units²</p>															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
							I	E	E	M					
District Objective Draw and analyze 3-dimensional figures.											PASS Process Standard V A		Quarter IV No. Days 2		
○ ITBS ○ CRT ○ EXPLORE ○ EOI ○ PLAN ○ ACT ○ AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures A. Draw and analyze 2- and 3-dimensional figures.													NCTM Standard Pg. 308		
Text Correlation 12.1, 12.2				Rating 1		Additional Resources Geometer's Sketchpad; Constructing the Octahedron and Its Dual Model Activity; Constructing Models Activity; Faces, Edges, Vertices Activity; Folding Polygons from a Circle Activity									
Assessment 1. Use the view to name the solid. <div style="display: flex; justify-content: space-around; width: 100%;"> top front side </div> <div style="display: flex; justify-content: space-around; width: 100%;"> (a) rectangular prism (b) square pyramid (c) cylinder (d) cube </div> 2. The figure below is a net for a rectangular solid. True or false?															

Honors Geometry: Data Analysis, Statistics and Probability															
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
								I	E	E	E	E	M		
District Objective Determine the probability of an event involving “and”, “or”, or “not”.												PASS Process Standard IV B		Quarter IV No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input checked="" type="radio"/> PLAN <input checked="" type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... V. Data Analysis, Statistics, and Probability C. Determine the probability of an event involving “and”, “or”, or “not”.													NCTM Standard Pgs. 308, 324		
Text Correlation				Rating		Additional Resources Probability Activity									
Assessment															
<p>1. If a cube is tossed onto the 10×10 square, what is the probability of the cube landing:</p> <p>a. on the circle?</p> <p>b. on the rectangle?</p> <p>c. on the circle or rectangle?</p> <p>d. on the circle and rectangle?</p> <p>e. neither the circle or the rectangle?</p> <p>2. If the probability that an event will happen is $\frac{5}{8}$, what is the probability that the event will NOT happen?</p> <p>*(a) $\frac{3}{8}$ (b) $\frac{3}{5}$ (c) $\frac{5}{3}$ (d) $\frac{8}{5}$</p> <p>(e) Cannot be determined from the given information</p>															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg I	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
								I		M					
District Objective Find the surface area of a right prism, regular pyramid, right circular cylinder, and right circular cone.												PASS Process Standard IV A, D		Quarter IV No. Days 3	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will... II. Properties of 2- and 3-Dimensional Figures C. Compute length, perimeter/circumference, area, volume, and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.												NCTM Standard Pg. 308			
Text Correlation 12.2, 12.3						Rating 1			Additional Resources Finding the Surface Area and Volume of a Swimming Pool Activity; The Platonic Solids in Your Classroom Activity						
Assessment 1. If all the angles in the faces of this polyhedron are right angles, then its surface area is ? (a) 1678 in.^2 (b) 4485 in.^2 (c) 1794 in.^2 (d) 839 in.^2 2. The surface area, in square centimeters, of this right cylinder is ? (a) $14\pi + 168\pi$ (b) $98\pi + 14\pi$ (c) $\pi + 14\pi$ (d) $\pi + 588\pi$ 3. A regular pyramid has a base area of $6\sqrt{3} \text{ in.}^2$, a base perimeter of 12 in., and a slant height of $4\sqrt{3} \text{ in.}$ Its surface area is ? (a) $24\sqrt{3} \text{ in.}^2$ (b) $54\sqrt{3} \text{ in.}^2$ (c) 36 in.^2 (d) $30\sqrt{3} \text{ in.}^2$ 4. The lateral area of this regular pyramid is ? (a) 84 ft^2 (b) 168 ft^2 (c) 336 ft^2 (d) 532 ft^2															

Geometry: Properties of 2- and 3-Dimensional Figures																
K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal	
								I		M						
District Objective Find the volume of a prism, pyramid, cylinder and cone.												PASS Process Standard IV A, D		Quarter IV No. Days 3		
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP																
PASS Objective The student will...														NCTM Standard Pg. 308		
II. Properties of 2- and 3-Dimensional Figures C. Compute length, perimeter/circumference, area, volume, and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.																
Text Correlation 12.4, 12.5					Rating 1			Additional Resources Volume and Surface Area Activity								
Assessment																
1. The volume of this pyramid is ? (a) $126\pi \text{ ft}^3$ (b) 126 ft^3 (c) 378 ft^3 (d) $195\pi \text{ ft}^3$																
2. The volume of this right prism is ? (a) $10\sqrt{13} \text{ ft}^3$ (b) $30\sqrt{13} \text{ ft}^3$ (c) 120 ft^3 (d) 60 ft^3																
3. The volume of this right circular cylinder is about? (a) 1061.9 m^3 (b) 326.7 m^3 (c) 1036.9 m^3 (d) 265.5 m^3																

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
								I		M					
District Objective Find the area and volume of a sphere.												PASS Process Standard IV A, D		Quarter IV No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...													NCTM Standard Pg. 308		
Text Correlation 12.6				Rating 1		Additional Resources Finding Surface Area and Volume Activity									
Assessment 1. There are 3 empty spherical containers with radii of 1, 2, and 4 meters, respectively. How many fillings of the middle - sized container would be equivalent to 1 filling of the largest container? (Note: The volume of a sphere of radius r is $\frac{4}{3}\pi r^3$.) (a) $\frac{1}{2}$ (b) 2 (c) 4 (d) 7 (e) 8 2. The surface area of this sphere is about ? (a) 69.4 ft^2 (b) 92.5 ft^2 (c) 434.9 ft^2 (d) 277.6 ft^2 3. The volume of the sphere is about ? (a) 277.6 ft^3 (b) 434.9 ft^3 (c) 69.4 ft^3 (d) 92.5 ft^3															

Honors Geometry: Properties of 2- and 3-Dimensional Figures

K	1	2	3	4	5	6	7	Pre- Alg	Alg 1	Geom	Alg II	MA	P & S	Pre- Cal	AP Cal
										I/E				M	
District Objective State and apply the properties of similar solids.												PASS Process Standard IV A, D		Quarter IV No. Days 2	
<input type="radio"/> ITBS <input type="radio"/> CRT <input type="radio"/> EXPLORE <input type="radio"/> EOI <input type="radio"/> PLAN <input type="radio"/> ACT <input type="radio"/> AP															
PASS Objective The student will...														NCTM Standard Pg. 308	
I. Logical Reasoning B. Determine and use the relationships of congruency and similarity to determine unknown values. II. Properties of 2- and 3-Dimensional Figures C. Compute length, perimeter/circumference, area, volume, and surface area of geometric objects with missing information and correctly identify the appropriate unit of measure of each.															
Text Correlation 12.7				Rating 1		Additional Resources Similar Shapes Extra Credit Activity									
Assessment															
1. Given that two prisms are similar, their area ratios are 4 cm^2 to 49 cm^2 . If the volume of the smaller prism is 32 cm^3 , find the volume of the larger prism.															

Suggested Strategies / Activities

