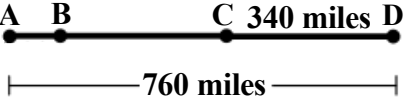
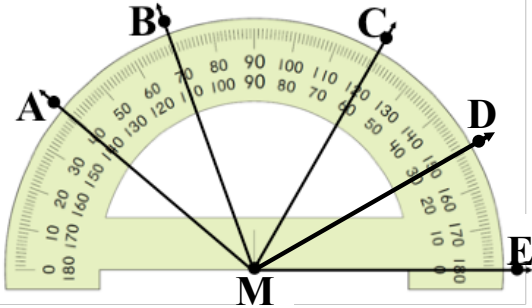
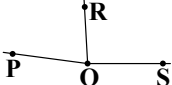
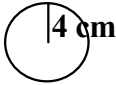
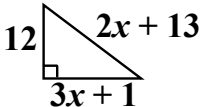
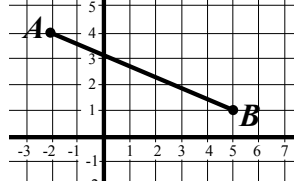


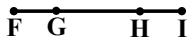
Mid-Semester 1 Final Review

Unit 1

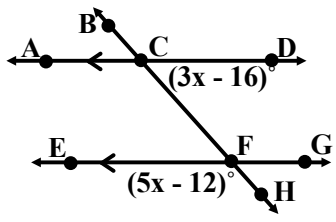
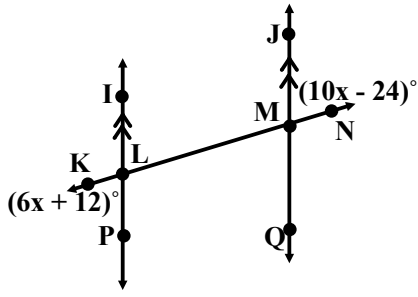
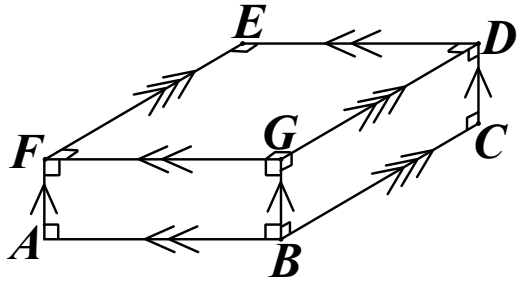
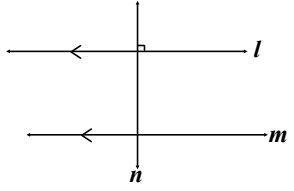
<p>1.</p>	<p>In the diagram below, <math>AD = 760</math> miles, <math>CD = 340</math> miles, and <math>C</math> is the midpoint of <math>\overline{BD}</math>. Find <math>AB</math>.</p> 	<p>5.</p>	<p>Find the measure of <math>\angle BMD</math>. Then, classify it as acute, right, or obtuse.</p> 
<p>2.</p>	<p><math>m\angle PQR = 77^\circ</math> and <math>m\angle RQS = 95^\circ</math>. Find <math>m\angle PQS</math>.</p> 	<p>6.</p>	<p>Find the circumference of the circle. Use 3.14 for <math>\pi</math>, and round your answer to the nearest tenth.</p> 
<p>3.</p>	<p>Find the area of the figure.</p> 	<p>7.</p>	<p>Find the coordinates of the midpoint of <math>\overline{AB}</math> with endpoints <math>A(-2, 4)</math> and <math>B(5, 1)</math>.</p> 

Unit 2

<p>8.</p>	<p>Identify the hypothesis and conclusion of the conditional statement. If it's raining, then the windows are closed.</p>	<p>12.</p>	<p>Write the converse, inverse and contrapositive of the conditional statement. If two angles are vertical, then their measures are equal.</p>
<p>9.</p>	<p>Write the converse, inverse and contrapositive of the conditional statement. If Fred is a dragon, then he breathes fire.</p>	<p>13.</p>	<p>Show that the conjecture is false by finding a counterexample. Use the answer choices below. If <math>x &lt; y</math>, then <math>x + y &gt; 0</math></p> <p>a. <math>x = 2, y = 3</math> b. <math>x = -2, y = -3</math> c. <math>x = -3, y = 1</math> d. <math>x = 1, y = -3</math></p>
<p>10.</p>	<p>Write the definition as a biconditional. Pentagons are polygons that have five sides.</p>		
<p>11.</p>	<p>Write a conditional statement from the statement. A mouse eats cheese.</p>		

14.	Identify the property that justifies each statement. a. $9 = 9$ b. $AB = BC$ , so $AB + BC = BC + BC$ c. $11x = 13 + 9$ , so $11x = 22$ d. If $EF \cong GH$ , then $GH \cong EF$ . e. $m\angle 1 = m\angle 2$ , and $m\angle 2 = m\angle 3$ . So, $m\angle 1 = m\angle 3$	16.	Complete the proof by supplying the missing reason. Given that $FH = GI$ , prove that $FG = HI$ . 																			
15.	Fill in the blank to complete the two-column proof. <b>Given:</b> $\angle 4$ and $\angle 5$ are a linear pair. $m\angle 4 = 106^\circ$ <b>Prove:</b> $m\angle 5 = 74^\circ$ <table border="1" data-bbox="219 472 808 703"> <thead> <tr> <th>Statements</th> <th>Reasons</th> </tr> </thead> <tbody> <tr> <td>1. <math>\angle 4</math> and <math>\angle 5</math> are a linear pair. <math>m\angle 4 = 106^\circ</math></td> <td>1. Given</td> </tr> <tr> <td>2. <math>m\angle 4 + m\angle 5 = 180^\circ</math></td> <td>2. [?]</td> </tr> <tr> <td>3. <math>106 + m\angle 5 = 180</math></td> <td>3. Subst. Prop. =</td> </tr> <tr> <td>4. <math>m\angle 5 = 74^\circ</math></td> <td>4. Subtr. Prop. =</td> </tr> </tbody> </table>	Statements	Reasons	1. $\angle 4$ and $\angle 5$ are a linear pair. $m\angle 4 = 106^\circ$	1. Given	2. $m\angle 4 + m\angle 5 = 180^\circ$	2. [?]	3. $106 + m\angle 5 = 180$	3. Subst. Prop. =	4. $m\angle 5 = 74^\circ$	4. Subtr. Prop. =	<table border="1" data-bbox="885 294 1485 682"> <tbody> <tr> <td><math>FH = GI</math></td> <td>Given information</td> </tr> <tr> <td><math>FH = FG + GH</math></td> <td>Segment Addition Postulate</td> </tr> <tr> <td><math>GI = GH + HI</math></td> <td>Segment Addition Postulate</td> </tr> <tr> <td><math>FG + GH = GH + HI</math></td> <td>[?]</td> </tr> <tr> <td><math>FG = HI</math></td> <td>Subtraction Property of Equality</td> </tr> </tbody> </table>	$FH = GI$	Given information	$FH = FG + GH$	Segment Addition Postulate	$GI = GH + HI$	Segment Addition Postulate	$FG + GH = GH + HI$	[?]	$FG = HI$	Subtraction Property of Equality
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### Unit 3

17.	Find $m\angle DCF$ . 	19.	Find $m\angle KLP$ . 						
18.	Identify the segments. a. Parallel to $\overline{AB}$ b. Perpendicular to $\overline{AB}$ c. Skew to $\overline{AB}$ 	20.	Use the answer choices below to fill in the missing reason. Given:  Prove: $m \perp n$ <table border="1" data-bbox="885 1648 1485 1753"> <tbody> <tr> <td>1. <math>l \parallel m</math></td> <td>1. Given</td> </tr> <tr> <td>2. <math>l \perp n</math></td> <td>2. Given</td> </tr> <tr> <td>3. <math>m \perp n</math></td> <td>3. _____</td> </tr> </tbody> </table> A. Perpendicular Transversal Theorem B. 2 int. lines form a lin. pair of $\cong \angle s \rightarrow$ lines $\perp$ C. Linear Pair Theorem D. Definition of a Midpoint	1. $l \parallel m$	1. Given	2. $l \perp n$	2. Given	3. $m \perp n$	3. _____
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