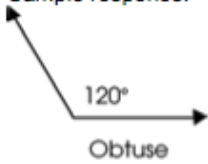
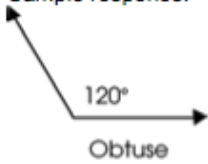
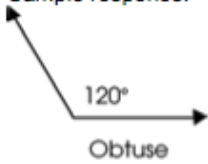


**5th Mathematics Ohio Graduation Test  
Geometry and Spatial Standard**

**Benchmark A**

Question 30	March 2006		A								
Question 42	March 2006	<table border="1"> <thead> <tr> <th align="left">Scoring Guidelines</th> <th align="left">Student Response</th> </tr> </thead> <tbody> <tr> <td>2</td> <td> <p>The focus of this task is drawing an angle and using a tool to measure the angle. The response shows the drawing of an obtuse angle with the appropriate measure of the angle drawn. Sample response:</p>  <p>NOTE: An appropriate angle measure must be within 5° of the actual angle measure and have a measurement from 91° to 179°.</p> </td> </tr> <tr> <td>1</td> <td> <p>The response provides partial evidence of drawing an angle and using a tool to measure the angle; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide a drawing of an angle that is obtuse, but fail to measure it or states that it is greater than 90°.</li> <li>• Provide a drawing of an acute angle, but accurately measures and labels the angle.</li> <li>• Provide the drawing of an obtuse angle that is not accurately measured.</li> </ul> </td> </tr> <tr> <td>0</td> <td> <p>The response provides inadequate evidence of drawing an angle and using a tool to measure the angle. The response provides major flaws in angle construction or irrelevant information. For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide a drawing of an angle that is not obtuse and not measure it.</li> <li>• Provide a drawing of an angle that is not obtuse and give an angle measure that does not reflect the angle shown.</li> <li>• Be blank or provide unrelated statements.</li> <li>• Recopy information from the stem.</li> </ul> </td> </tr> </tbody> </table>	Scoring Guidelines	Student Response	2	<p>The focus of this task is drawing an angle and using a tool to measure the angle. The response shows the drawing of an obtuse angle with the appropriate measure of the angle drawn. Sample response:</p>  <p>NOTE: An appropriate angle measure must be within 5° of the actual angle measure and have a measurement from 91° to 179°.</p>	1	<p>The response provides partial evidence of drawing an angle and using a tool to measure the angle; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide a drawing of an angle that is obtuse, but fail to measure it or states that it is greater than 90°.</li> <li>• Provide a drawing of an acute angle, but accurately measures and labels the angle.</li> <li>• Provide the drawing of an obtuse angle that is not accurately measured.</li> </ul>	0	<p>The response provides inadequate evidence of drawing an angle and using a tool to measure the angle. The response provides major flaws in angle construction or irrelevant information. For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide a drawing of an angle that is not obtuse and not measure it.</li> <li>• Provide a drawing of an angle that is not obtuse and give an angle measure that does not reflect the angle shown.</li> <li>• Be blank or provide unrelated statements.</li> <li>• Recopy information from the stem.</li> </ul>	
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Question 4	Spring 2007		B								

**Benchmark B**

Question 43	Spring 2010		A
Question 22	March 2008		B
Question 27	March 2006		C
Question 44	March 2006		B
Question 31	March 2007		B

**Benchmark C**

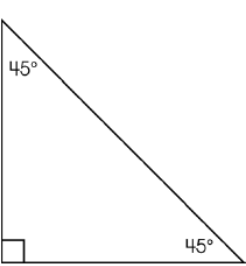
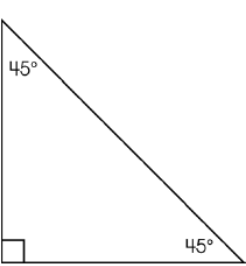
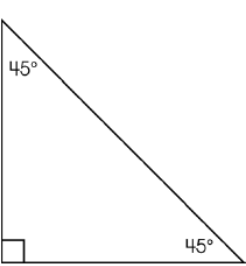
Question 32	Spring 2010		D
Question 7	Spring 2009		B
Question 4	March 2008		D
Question 36	March 2006		C

**Benchmark D**

Question 11	Spring 2010		C
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Question 35	March 2008		A
Question 1	March 2006		D
Question 19	March 2007		C

### Benchmark G

Question 38	Spring 2010	<table border="1"> <thead> <tr> <th>Points</th> <th>Student Response</th> </tr> </thead> <tbody> <tr> <td>2 point</td> <td> <p><b>Exemplar Response:</b></p>  <p>The other 2 angles each measure 45 degrees. The sum of the interior angles of a triangle equals <math>180^\circ</math>. <math>180^\circ - 90^\circ = 90^\circ</math> and <math>90^\circ \div 2 = 45^\circ</math>.</p> <p>The focus of this task is drawing a physical model and finding the missing angle measures. The response provides an adequate drawing of the desk with accurate measures for the missing angles. The response also provides an adequate explanation of determining the measures of the other two angles.</p> </td> </tr> <tr> <td>1 point</td> <td>The response shows partial evidence of drawing a physical model and finding the missing angle measures; however, the solution may be incomplete or slightly flawed.</td> </tr> <tr> <td>0 point</td> <td> <p>The response provides inadequate evidence of drawing a physical model and finding the missing angle measures. The response provides major flaws in explanations or irrelevant information.</p> <p><b>0 point sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide three angle measures that do not add up to <math>180^\circ</math>.</li> <li>• Restate the information provided in the item.</li> <li>• Be blank or give irrelevant information.</li> </ul> </td> </tr> </tbody> </table>	Points	Student Response	2 point	<p><b>Exemplar Response:</b></p>  <p>The other 2 angles each measure 45 degrees. The sum of the interior angles of a triangle equals <math>180^\circ</math>. <math>180^\circ - 90^\circ = 90^\circ</math> and <math>90^\circ \div 2 = 45^\circ</math>.</p> <p>The focus of this task is drawing a physical model and finding the missing angle measures. The response provides an adequate drawing of the desk with accurate measures for the missing angles. The response also provides an adequate explanation of determining the measures of the other two angles.</p>	1 point	The response shows partial evidence of drawing a physical model and finding the missing angle measures; however, the solution may be incomplete or slightly flawed.	0 point	<p>The response provides inadequate evidence of drawing a physical model and finding the missing angle measures. The response provides major flaws in explanations or irrelevant information.</p> <p><b>0 point sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• Provide three angle measures that do not add up to <math>180^\circ</math>.</li> <li>• Restate the information provided in the item.</li> <li>• Be blank or give irrelevant information.</li> </ul>	
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Question 21	March 2006		A								

### Benchmark I

Question 16	Spring 2009		A
Question 18	March 2006		D
Question 39	March 2006		C

## Benchmark J

Question 11	Spring 2009		D								
Question 19	March 2008		D								
Question 38	Spring 2007	<p><b>Scoring Guidelines</b></p> <table border="1"> <thead> <tr> <th>Points</th> <th>Student Response</th> </tr> </thead> <tbody> <tr> <td>2 point</td> <td> <p>The focus of this task is using properties of congruent rectangles to solve a problem. The response provides a correct length and width for both of the congruent fields with an adequate explanation.</p> <p><b>Exemplar Response:</b> The two new fields will be 20 yards wide and 25 yards long because half of 50 is 25. They are congruent because they are both rectangles with the same length and same width.</p> <p>The two new fields will be 10 yards wide and 50 yards long because I cut the width in half. They are congruent because they are exactly the same size and same shape.</p> </td> </tr> <tr> <td>1 point</td> <td> <p>The response shows partial evidence of using properties of congruent rectangles to solve a problem; however, the solution may be incomplete or slightly flawed.</p> <p><b>Sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• State that he should divide the length in half and keep the width the same but not provide the new measurements or an explanation.</li> <li>• Provide an accurate length and width for the two congruent fields without an explanation.</li> <li>• Provide a length of 25 yards and a width of 10 yards.</li> </ul> </td> </tr> <tr> <td>0 point</td> <td> <p>The response provides inadequate evidence of using properties of congruent rectangles to solve a problem. The response provides major flaws in explanations or irrelevant information.</p> <p><b>Sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• State that the new field will be 20 yards wide and 50 yards long.</li> <li>• Restate the information provided in the item.</li> <li>• Be blank or give irrelevant information.</li> </ul> </td> </tr> </tbody> </table>	Points	Student Response	2 point	<p>The focus of this task is using properties of congruent rectangles to solve a problem. The response provides a correct length and width for both of the congruent fields with an adequate explanation.</p> <p><b>Exemplar Response:</b> The two new fields will be 20 yards wide and 25 yards long because half of 50 is 25. They are congruent because they are both rectangles with the same length and same width.</p> <p>The two new fields will be 10 yards wide and 50 yards long because I cut the width in half. They are congruent because they are exactly the same size and same shape.</p>	1 point	<p>The response shows partial evidence of using properties of congruent rectangles to solve a problem; however, the solution may be incomplete or slightly flawed.</p> <p><b>Sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• State that he should divide the length in half and keep the width the same but not provide the new measurements or an explanation.</li> <li>• Provide an accurate length and width for the two congruent fields without an explanation.</li> <li>• Provide a length of 25 yards and a width of 10 yards.</li> </ul>	0 point	<p>The response provides inadequate evidence of using properties of congruent rectangles to solve a problem. The response provides major flaws in explanations or irrelevant information.</p> <p><b>Sample answer:</b> For example, the response may:</p> <ul style="list-style-type: none"> <li>• State that the new field will be 20 yards wide and 50 yards long.</li> <li>• Restate the information provided in the item.</li> <li>• Be blank or give irrelevant information.</li> </ul>	
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