

**5th Mathematics Ohio Achievement Test
Measurement Standard**

Benchmark A

Question 12	Spring 2010		B
Question 45	Spring 2009		A
Question 12	March 2008		A
Question 19	March 2006		C
Question 13	Spring 2007		D

Benchmark B

Question 2	Spring 2010		C										
Question 43	March 2008		C										
Question 31	March 2006		D										
Question 38	March 2006	<table border="1"> <thead> <tr> <th colspan="2">Scoring Guidelines</th> </tr> <tr> <th>Points</th> <th>Student Response</th> </tr> </thead> <tbody> <tr> <td align="center">2</td> <td> <p>The focus of this task is converting units of time within the same measurement system. The response correctly determines the time Peter should read on Friday with supporting work or an adequate explanation.</p> <p>Sample response:</p> <ul style="list-style-type: none"> 30 minutes + 1 hour 15 minutes + 1 hour 5 minutes + 40 minutes = 2 hours 90 minutes; 60 minutes = 1 hour so 2 hours 90 minutes = 3 hours 30 minutes. 5 hours – 3 hours 30 minutes = 1 hour 30 minutes. 60 minutes = 1 hour, so 30 minutes + 75 minutes + 65 minutes + 40 minutes = 210 minutes. 5 hours = 300 minutes, so 300 minutes – 210 minutes = 90 minutes. Peter must read for 90 minutes. <p>3 hours 30 minutes = 3.5 hours so 5 hours – 3.5 hours = 1.5 hours.</p> </td> </tr> <tr> <td align="center">1</td> <td> <p>The response provides partial evidence of converting units of time within the same measurement system; however, the solution may be incomplete or slightly flawed.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> Show a minor computational error when converting, adding or subtracting. Find only the total time Peter has already read. Provide the correct answer without an explanation or work. </td> </tr> <tr> <td align="center">0</td> <td> <p>The response provides inadequate evidence of converting units of time within the same measurement system. The response provides major flaws in conversion or irrelevant information.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> State 100 minutes. Be blank or provide unrelated statements. Recopy information from the stem. </td> </tr> </tbody> </table>	Scoring Guidelines		Points	Student Response	2	<p>The focus of this task is converting units of time within the same measurement system. The response correctly determines the time Peter should read on Friday with supporting work or an adequate explanation.</p> <p>Sample response:</p> <ul style="list-style-type: none"> 30 minutes + 1 hour 15 minutes + 1 hour 5 minutes + 40 minutes = 2 hours 90 minutes; 60 minutes = 1 hour so 2 hours 90 minutes = 3 hours 30 minutes. 5 hours – 3 hours 30 minutes = 1 hour 30 minutes. 60 minutes = 1 hour, so 30 minutes + 75 minutes + 65 minutes + 40 minutes = 210 minutes. 5 hours = 300 minutes, so 300 minutes – 210 minutes = 90 minutes. Peter must read for 90 minutes. <p>3 hours 30 minutes = 3.5 hours so 5 hours – 3.5 hours = 1.5 hours.</p>	1	<p>The response provides partial evidence of converting units of time within the same measurement system; however, the solution may be incomplete or slightly flawed.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> Show a minor computational error when converting, adding or subtracting. Find only the total time Peter has already read. Provide the correct answer without an explanation or work. 	0	<p>The response provides inadequate evidence of converting units of time within the same measurement system. The response provides major flaws in conversion or irrelevant information.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> State 100 minutes. Be blank or provide unrelated statements. Recopy information from the stem. 	
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Question 30	Spring 2007		C										

Benchmark C

Question 5	March 2008	Scoring Guidelines	
		Points	Student Response
		2 point	<p>The focus of this task is finding the area and perimeter of a rectangle. The response correctly finds the area and the perimeter of the rectangle with appropriate units.</p> <ul style="list-style-type: none"> • There are 200 squares inside the rectangle. The area is 200 square feet. I counted the lines on the outside of the rectangle. Perimeter = 66 feet. • Area: $8 \times 25 = 200$ square feet; Perimeter: $25 + 8 + 25 + 8 = 66$ feet. • Area = $lw = 200$ square feet; Perimeter = $2(l + w) = 66$ feet.
		1 point	<p>The response provides partial evidence of finding the area and perimeter of a rectangle; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> • State the area and perimeter correctly but show no work. • State at least one measurement correctly with work. • State both measurements correctly with supporting work but incorrect or no units. • Provide the correct strategy to find area and perimeter but show area and perimeter incorrectly.
0 point text	<p>The response provides inadequate evidence of finding the area and perimeter of a rectangle. The response provides major flaws in reasoning or irrelevant information. For example, the response may:</p> <ul style="list-style-type: none"> • Show that area and perimeter are the same. • State the perimeter is 33 feet. • Be blank or state unrelated statements. • Recopy information from the stem. 		
Question 24	March 2008		B
Question 9	March 2006		C
Question 8	Spring 2007		D

Benchmark D

Question 9	March 2006		C
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Benchmark E

Question 29	Spring 2010	<table border="1"> <thead> <tr> <th data-bbox="639 275 776 296">Points</th> <th data-bbox="781 275 1417 296">Student Response</th> </tr> </thead> <tbody> <tr> <td data-bbox="639 302 776 898">2 point</td> <td data-bbox="781 302 1417 898"> <p>Exemplar Response:</p> <p>.</p> <p style="text-align: center;">Parent-Teacher Conference Times</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Monday</th> <th>Tuesday</th> <th>Wednesday</th> </tr> </thead> <tbody> <tr><td>2:00</td><td>2:00</td><td>2:00</td></tr> <tr><td>2:20</td><td>2:20</td><td>2:20</td></tr> <tr><td>2:40</td><td>2:40</td><td>2:40</td></tr> <tr><td>3:00</td><td>3:00</td><td></td></tr> <tr><td>3:20</td><td>3:20</td><td></td></tr> <tr><td>3:40</td><td>3:40</td><td></td></tr> <tr><td>4:00</td><td>4:00</td><td></td></tr> <tr><td>4:20</td><td>4:20</td><td></td></tr> <tr><td>4:40</td><td>4:40</td><td></td></tr> </tbody> </table> <p>Conferences will end at 3 p.m. on Wednesday.</p> <ul style="list-style-type: none"> Number of conferences each hour is 3. 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Question 46	Spring 2007		B

Benchmark G

Question 30	Spring 2009	C
Question 2	March 2008	C

Question 25	March 2006	<p>Scoring Guidelines</p> <table border="1"> <thead> <tr> <th data-bbox="630 216 727 237">Points</th> <th data-bbox="735 216 1411 237">Student Response</th> </tr> </thead> <tbody> <tr> <td data-bbox="630 247 727 499">2</td> <td data-bbox="735 247 1411 499"> <p>The focus of this task is describing the difference between surface area and volume for a three-dimensional object. The response provides an adequate explanation of the difference between surface area and volume, using appropriate examples.</p> <p>Sample response:</p> <ul style="list-style-type: none"> • The surface area is the area of the faces (top, bottom and sides) of the toy box and the volume is the amount of space inside the toy box. • The surface area is measured with square units but the volume is measured in cubic units. <p>The surface area is how much material is used to cover the toy box and the volume is how many toys Justin can fit into the box.</p> </td> </tr> <tr> <td data-bbox="630 510 727 741">1</td> <td data-bbox="735 510 1411 741"> <p>The response provides partial evidence of describing the difference between surface area and volume for a figure; however, the solution may be incomplete or slightly flawed.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Provide an adequate explanation of surface area as it pertains to the toy box, but the explanation of volume is incorrect or missing. • Provide an adequate explanation of volume as it pertains to the toy box, but the explanation of surface area is incorrect or missing. • State that the surface area is outside of the box and/or the volume is inside of the box. </td> </tr> <tr> <td data-bbox="630 751 727 898">0</td> <td data-bbox="735 751 1411 898"> <p>The response provides inadequate evidence of describing the difference between surface area and volume for a figure. The response provides major flaws in reasoning or irrelevant information.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • State that volume and surface area are the same. • Be blank or provide unrelated statements. • Recopy information from the stem. </td> </tr> </tbody> </table>	Points	Student Response	2	<p>The focus of this task is describing the difference between surface area and volume for a three-dimensional object. The response provides an adequate explanation of the difference between surface area and volume, using appropriate examples.</p> <p>Sample response:</p> <ul style="list-style-type: none"> • The surface area is the area of the faces (top, bottom and sides) of the toy box and the volume is the amount of space inside the toy box. • The surface area is measured with square units but the volume is measured in cubic units. <p>The surface area is how much material is used to cover the toy box and the volume is how many toys Justin can fit into the box.</p>	1	<p>The response provides partial evidence of describing the difference between surface area and volume for a figure; however, the solution may be incomplete or slightly flawed.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Provide an adequate explanation of surface area as it pertains to the toy box, but the explanation of volume is incorrect or missing. • Provide an adequate explanation of volume as it pertains to the toy box, but the explanation of surface area is incorrect or missing. • State that the surface area is outside of the box and/or the volume is inside of the box. 	0	<p>The response provides inadequate evidence of describing the difference between surface area and volume for a figure. The response provides major flaws in reasoning or irrelevant information.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • State that volume and surface area are the same. • Be blank or provide unrelated statements. • Recopy information from the stem.
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