

**3rd Mathematics Achievement Test
Measurement Standard**

Benchmark A

Question 29	Spring 2010	<table border="1"> <thead> <tr> <th>Points</th> <th>Student Response</th> </tr> </thead> <tbody> <tr> <td>2 point</td> <td> <p>The response correctly completes the pattern and describes the rule.</p> <p>Examples of correct responses:</p> <p>4, 8, 12, 16, <u>20</u>, <u>24</u>, <u>28</u></p> <ul style="list-style-type: none"> • Plus 4 • 4 is added to each number • The numbers are multiples of 4 • Shows number sentences using repeated addition. </td> </tr> <tr> <td>1 point</td> <td> <p>The response finishes the pattern correctly, but does not explain the rule.</p> <p>OR</p> <p>The response explains the rule of repeated addition or multiples of 4 but does not have the correct numbers in the pattern.</p> <p>1 point sample answer: NA</p> </td> </tr> <tr> <td>0 point</td> <td>The response indicates no understanding of the concept or task.</td> </tr> </tbody> </table>	Points	Student Response	2 point	<p>The response correctly completes the pattern and describes the rule.</p> <p>Examples of correct responses:</p> <p>4, 8, 12, 16, <u>20</u>, <u>24</u>, <u>28</u></p> <ul style="list-style-type: none"> • Plus 4 • 4 is added to each number • The numbers are multiples of 4 • Shows number sentences using repeated addition. 	1 point	<p>The response finishes the pattern correctly, but does not explain the rule.</p> <p>OR</p> <p>The response explains the rule of repeated addition or multiples of 4 but does not have the correct numbers in the pattern.</p> <p>1 point sample answer: NA</p>	0 point	The response indicates no understanding of the concept or task.
		Points	Student Response							
		2 point	<p>The response correctly completes the pattern and describes the rule.</p> <p>Examples of correct responses:</p> <p>4, 8, 12, 16, <u>20</u>, <u>24</u>, <u>28</u></p> <ul style="list-style-type: none"> • Plus 4 • 4 is added to each number • The numbers are multiples of 4 • Shows number sentences using repeated addition. 							
		1 point	<p>The response finishes the pattern correctly, but does not explain the rule.</p> <p>OR</p> <p>The response explains the rule of repeated addition or multiples of 4 but does not have the correct numbers in the pattern.</p> <p>1 point sample answer: NA</p>							
0 point	The response indicates no understanding of the concept or task.									
Question 31	May 2009	B								
Question 19	March 2008	B								
Question 44	March 2005	C								
Question 18	Fall 2005	C								
Question 1	March 2006	C								
Question 38	Spring 2007	<p>The focus of this task is identifying appropriate units for measuring temperature. The response states that the thermometer is broken and provides an adequate explanation that the temperature is too high.</p> <ul style="list-style-type: none"> • The thermometer is broken because the temperature is too high for a snowy day. • The thermometer is broken because the temperature is 75 degrees. That's too hot! 								

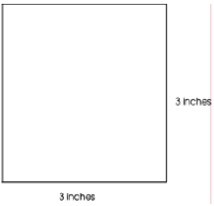
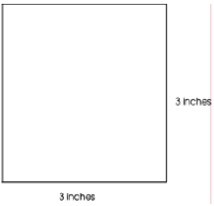
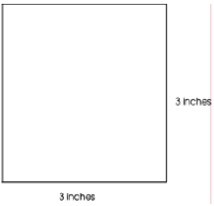
Benchmark B

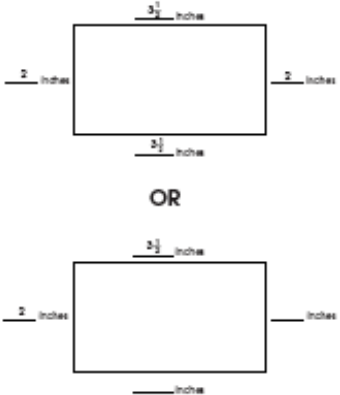
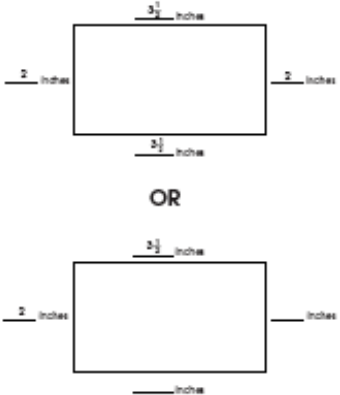
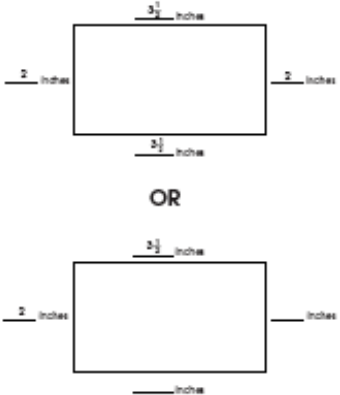
Question 6	Spring 2010	C

Benchmark C

Question 46	Spring 2010		C
Question 14	Spring 2010		A
Question 35	May 2009		C
Question 22	March 2005		A
Question 27	March 2005		B
Question 3	March 2006		A
Question 30	Spring 2007		B
Question 33	Spring 2007	<p>The response will consist of the following:</p> <ul style="list-style-type: none">• clearly indicates \$7• uses a correct strategy• circles money consistent with the first answer• finds change consistent with the first answer <p>Possible correct strategies:</p> <ul style="list-style-type: none">• I added the numbers in my head.• Draws the correct money for the 3 items. <p>NOTE: Omission or incorrect placement of dollar signs will not penalize the student; however, <u>wrong decimal placement is penalized.</u></p>	
Question 44	Spring 2007		B

Benchmark D

Question 7	May 2009		C										
Question 25	May 2009	<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>2 point</td> <td>The response shows an approximately rectangular shape with sides ± 2 mm of given side lengths and correctly labels at least two consecutive sides correctly.</td> </tr> <tr> <td>1 point</td> <td>The response shows an approximately rectangular shape with consecutive sides labeled as 4 cm and 7 cm, but with incorrect lengths. OR The response shows a rectangular shape with no or incorrect labels, but with correct lengths. OR The response shows a non-rectangular figure that has two sides of lengths 4 cm and 7 cm or 4 inches and 7 inches with or without labels.</td> </tr> <tr> <td>0 point</td> <td>The response indicates no understanding of the concept or task. OR The response shows a non-rectangular figure with no sides of 3 cm and 4 cm and no labels.</td> </tr> </tbody> </table>	Scoring Guidelines		Points	Student Response	2 point	The response shows an approximately rectangular shape with sides ± 2 mm of given side lengths and correctly labels at least two consecutive sides correctly.	1 point	The response shows an approximately rectangular shape with consecutive sides labeled as 4 cm and 7 cm, but with incorrect lengths. OR The response shows a rectangular shape with no or incorrect labels, but with correct lengths. OR The response shows a non-rectangular figure that has two sides of lengths 4 cm and 7 cm or 4 inches and 7 inches with or without labels.	0 point	The response indicates no understanding of the concept or task. OR The response shows a non-rectangular figure with no sides of 3 cm and 4 cm and no labels.	
Scoring Guidelines													
Points	Student Response												
2 point	The response shows an approximately rectangular shape with sides ± 2 mm of given side lengths and correctly labels at least two consecutive sides correctly.												
1 point	The response shows an approximately rectangular shape with consecutive sides labeled as 4 cm and 7 cm, but with incorrect lengths. OR The response shows a rectangular shape with no or incorrect labels, but with correct lengths. OR The response shows a non-rectangular figure that has two sides of lengths 4 cm and 7 cm or 4 inches and 7 inches with or without labels.												
0 point	The response indicates no understanding of the concept or task. OR The response shows a non-rectangular figure with no sides of 3 cm and 4 cm and no labels.												
Question 6	March 2008		A										
Question 33	March 2008	<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>2 point</td> <td> <p>Sample Correct Response:</p> <ul style="list-style-type: none"> • 3 cm  <p>The focus of this task is using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length. The response provides the correct length of the side in centimeters of the original square and an accurate drawing of a square with 3 inch long sides. NOTE: Side lengths should be within one-quarter of an inch.</p> </td> </tr> <tr> <td>1 point</td> <td> <p>The response provides partial evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> • State an incorrect measurement or incorrect units for the side of the original three-centimeter square but drew the square correctly in inches. • Show a drawing of a square with incorrect measurements; but, states the original squares' measurements correctly. </td> </tr> <tr> <td>0 point</td> <td> <p>The response provides inadequate evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length.</p> <ul style="list-style-type: none"> • State an incorrect measurement of the square and provide a drawing of a shape that is not a square. • Restate the information provided in the item. • Be blank or give irrelevant information. </td> </tr> </tbody> </table>	Scoring Guidelines		Points	Student Response	2 point	<p>Sample Correct Response:</p> <ul style="list-style-type: none"> • 3 cm  <p>The focus of this task is using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length. The response provides the correct length of the side in centimeters of the original square and an accurate drawing of a square with 3 inch long sides. NOTE: Side lengths should be within one-quarter of an inch.</p>	1 point	<p>The response provides partial evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> • State an incorrect measurement or incorrect units for the side of the original three-centimeter square but drew the square correctly in inches. • Show a drawing of a square with incorrect measurements; but, states the original squares' measurements correctly. 	0 point	<p>The response provides inadequate evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length.</p> <ul style="list-style-type: none"> • State an incorrect measurement of the square and provide a drawing of a shape that is not a square. • Restate the information provided in the item. • Be blank or give irrelevant information. 	
Scoring Guidelines													
Points	Student Response												
2 point	<p>Sample Correct Response:</p> <ul style="list-style-type: none"> • 3 cm  <p>The focus of this task is using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length. The response provides the correct length of the side in centimeters of the original square and an accurate drawing of a square with 3 inch long sides. NOTE: Side lengths should be within one-quarter of an inch.</p>												
1 point	<p>The response provides partial evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length; however, the solution may be incomplete or slightly flawed. For example, the response may:</p> <ul style="list-style-type: none"> • State an incorrect measurement or incorrect units for the side of the original three-centimeter square but drew the square correctly in inches. • Show a drawing of a square with incorrect measurements; but, states the original squares' measurements correctly. 												
0 point	<p>The response provides inadequate evidence of using appropriate measurement tools and techniques to measure the length of a given figure and to construct a figure of specified length.</p> <ul style="list-style-type: none"> • State an incorrect measurement of the square and provide a drawing of a shape that is not a square. • Restate the information provided in the item. • Be blank or give irrelevant information. 												

Question 5	Fall 2005	<p><input checked="" type="checkbox"/> Scoring Guidelines</p> <table border="0"> <thead> <tr> <th data-bbox="527 243 597 268">Points</th> <th data-bbox="878 243 1065 268">Student Response</th> </tr> </thead> <tbody> <tr> <td data-bbox="548 285 576 310">2</td> <td data-bbox="643 285 1403 310">The response correctly identifies the lengths, in centimeters, of all 3 sides of the triangle.</td> </tr> <tr> <td data-bbox="548 321 576 346">1</td> <td data-bbox="643 321 1166 346">The response identifies a correct length for one or two sides.</td> </tr> <tr> <td colspan="2" data-bbox="643 363 670 388">OR</td> </tr> <tr> <td></td> <td data-bbox="643 401 1419 443">The response identifies a correct length, to the nearest quarter- or half-inch (3, 2 3/4, and 2), for all three sides.</td> </tr> <tr> <td data-bbox="548 464 576 489">0</td> <td data-bbox="643 464 1403 520">The response indicates inadequate skill in measuring the sides of the triangle in centimeters. For example, includes incorrect measures for all sides, OR appears to have measured in inches and at least one measure is incorrect.</td> </tr> </tbody> </table>	Points	Student Response	2	The response correctly identifies the lengths, in centimeters, of all 3 sides of the triangle.	1	The response identifies a correct length for one or two sides.	OR			The response identifies a correct length, to the nearest quarter- or half-inch (3, 2 3/4, and 2), for all three sides.	0	The response indicates inadequate skill in measuring the sides of the triangle in centimeters. For example, includes incorrect measures for all sides, OR appears to have measured in inches and at least one measure is incorrect.
Points	Student Response													
2	The response correctly identifies the lengths, in centimeters, of all 3 sides of the triangle.													
1	The response identifies a correct length for one or two sides.													
OR														
	The response identifies a correct length, to the nearest quarter- or half-inch (3, 2 3/4, and 2), for all three sides.													
0	The response indicates inadequate skill in measuring the sides of the triangle in centimeters. For example, includes incorrect measures for all sides, OR appears to have measured in inches and at least one measure is incorrect.													
Question 2	March 2005	B												
Question 6	March 2005	C												
Question 16	March 2005	B												
Question 46	March 2005	<table border="1"> <thead> <tr> <th colspan="2" data-bbox="751 762 919 787">Scoring Guidelines</th> </tr> <tr> <th data-bbox="751 787 821 812">Points</th> <th data-bbox="1036 787 1198 812">Student Response</th> </tr> </thead> <tbody> <tr> <td data-bbox="776 1016 803 1041">2</td> <td data-bbox="829 812 1382 863">The response shows a correct measure of $3\frac{1}{2}$ and 2 for each pair of opposite sides with no incorrect measures.</td> </tr> <tr> <td></td> <td data-bbox="829 863 1166 1255">  </td> </tr> <tr> <td data-bbox="776 1276 803 1302">1</td> <td data-bbox="829 1262 1393 1318">The response shows at least one side correctly labeled, or each pair of opposite sides correctly measured in centimeters instead of inches (9 cm and 5 cm).</td> </tr> <tr> <td data-bbox="776 1329 803 1354">0</td> <td data-bbox="829 1329 1393 1367">The response indicates no understanding of the task or the underlying skills, concepts, tasks, or processes.</td> </tr> </tbody> </table>	Scoring Guidelines		Points	Student Response	2	The response shows a correct measure of $3\frac{1}{2}$ and 2 for each pair of opposite sides with no incorrect measures.			1	The response shows at least one side correctly labeled, or each pair of opposite sides correctly measured in centimeters instead of inches (9 cm and 5 cm).	0	The response indicates no understanding of the task or the underlying skills, concepts, tasks, or processes.
Scoring Guidelines														
Points	Student Response													
2	The response shows a correct measure of $3\frac{1}{2}$ and 2 for each pair of opposite sides with no incorrect measures.													
														
1	The response shows at least one side correctly labeled, or each pair of opposite sides correctly measured in centimeters instead of inches (9 cm and 5 cm).													
0	The response indicates no understanding of the task or the underlying skills, concepts, tasks, or processes.													
Question 8	March 2006	C												
Question 27	Spring 2007	B												

Benchmark E

Question 40	Spring 2010		A								
Question 42	Spring 2010	<table border="1"> <thead> <tr> <th>Points</th> <th>Student Response</th> </tr> </thead> <tbody> <tr> <td>2 point</td> <td> <p>The response states a correct time of 11:15 or 11:15 a.m. and draws the short hand to the 11 or shortly past the 11, AND draws the long hand to the 3.</p> <p>For example: 11:15 or 11:15 a.m. and draws 11:15 on clock</p> </td> </tr> <tr> <td>1 point</td> <td> <p>The response states the correct time OR shows the correct elapsed time (11:15) on the clock.</p> <p>OR</p> <p>The response draws the hours and minutes hands correctly for the time given.</p> <p>Example: 7:15, hands drawn to accurately reflect 7:15.</p> <p>1 point sample answer: NA</p> </td> </tr> <tr> <td>0 point</td> <td> <p>The response indicates no understanding of the concept or task.</p> <p>0 point sample answer: NA</p> </td> </tr> </tbody> </table>	Points	Student Response	2 point	<p>The response states a correct time of 11:15 or 11:15 a.m. and draws the short hand to the 11 or shortly past the 11, AND draws the long hand to the 3.</p> <p>For example: 11:15 or 11:15 a.m. and draws 11:15 on clock</p>	1 point	<p>The response states the correct time OR shows the correct elapsed time (11:15) on the clock.</p> <p>OR</p> <p>The response draws the hours and minutes hands correctly for the time given.</p> <p>Example: 7:15, hands drawn to accurately reflect 7:15.</p> <p>1 point sample answer: NA</p>	0 point	<p>The response indicates no understanding of the concept or task.</p> <p>0 point sample answer: NA</p>	
		Points	Student Response								
		2 point	<p>The response states a correct time of 11:15 or 11:15 a.m. and draws the short hand to the 11 or shortly past the 11, AND draws the long hand to the 3.</p> <p>For example: 11:15 or 11:15 a.m. and draws 11:15 on clock</p>								
		1 point	<p>The response states the correct time OR shows the correct elapsed time (11:15) on the clock.</p> <p>OR</p> <p>The response draws the hours and minutes hands correctly for the time given.</p> <p>Example: 7:15, hands drawn to accurately reflect 7:15.</p> <p>1 point sample answer: NA</p>								
0 point	<p>The response indicates no understanding of the concept or task.</p> <p>0 point sample answer: NA</p>										
Question 39	March 2008		B								
Question 1	Fall 2005		A								
Question 31	March 2005		A								
Question 25	March 2006	<p>The response states the correct time of 5:30 and draws the hours and minutes hands accurately on the clock.</p> <p>For example: Writes 5:30, correctly draws short hand to the 5 or halfway between the 5 and 6, AND draws long hand to 6.</p>									
Question 11	Spring 2007		B								