

**10th Mathematics Ohio Graduation Test
Measurement**

Benchmark A

Question 20	Spring 2005		A
Question 34	Spring 2006	<p>Scoring Guidelines for Item 34:</p> <p>Score point Directions</p> <p>2-points The focus of the item is to determine the area, to the nearest square foot, of the wall to be painted. The response indicates that the area to be painted is approximately 214 ft² with supporting work or explanation.</p> <p>1-point The response provides evidence of a partially correct answer and/or solution process. The response shows understanding of some key elements of the task but contains gaps or flaws.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Provide an incorrect area based on a slightly flawed process (e.g., the area of the entire wall but fail to subtract the area of the door.) • Provide a correct process for finding the area to be painted but contain computational errors. • Provide a correct area to be painted with missing or incomplete work/explanation. <p>0 points The response indicates inadequate understanding of the task.</p>	

Benchmark B

Question 5	Spring 2009	<p>Scoring Guidelines for Item 5:</p> <p>Score Point Description</p> <p>2 points The focus of the item is to find the volumes of both cans and to determine the relationship between the two volumes. The response contains the volumes for the two cans with a comparison of these two volumes. Explanation may be supported by formula, diagrams or words.</p> <p>1 point The response provides evidence of a partially correct answer and/or solution process. The response shows understanding of some key elements of the task but contains gaps or flaws.</p> <p> 1 point sample answer:</p> <p> For example, the response may:</p> <ul style="list-style-type: none"> • Correctly find the volumes of the cylinders, the comparison of the volumes is incorrect or missing. • Demonstrate a correct process for finding both volumes but contain calculation errors. The comparison of volumes is consistent based on the miscalculations. • Find the volumes using the diameter (2 in.) instead of radius (1 in.) and state that the juice can is 8 times greater than the volume of the cola can. • State that the volume of the juice can is 8 times greater than the volume of the cola can with incomplete or missing work for finding the volumes. <p>0 points The response indicates inadequate understanding of the task, and the response does not meet the criteria required to earn one point.</p> <p> 0 point sample answer:</p> <p> For example, the response may:</p> <ul style="list-style-type: none"> • State only one of the two volumes. • States 8 with no explanation. • Recopy information provided in the item with no work. • Be blank or the student writes, "I do not know" or includes unrelated statements or work.
Question 32	Spring 2009	A
Question 29	March 2008	D
Question 44	March 2008	B
Question 9	Spring 2003	C
Question 19	Spring 2003	D
Question 17	Spring 2004	C

Benchmark B (Continued)

Question 10	Spring 2005	A
Question 30	Spring 2006	D
Question 37	Spring 2005	B
Question 41	March 2007	B

Benchmark C

Question 39	Spring 2009	B
Question 20	March 2008	C
Question 36	March 2008	C
Question 12	Spring 2003	C
Question 36	Spring 2003	B
Question 37	Spring 2004	C

Question 5	Spring 2005	C
Question 16	Spring 2005	C
Question 42	Spring 2006	D
Question 27	March 2007	C

Benchmark D

Question 20	Spring 2009	A
Question 9	March 2008	A
Question 4	Spring 2005	B
Question 4	Spring 2003	A
Question 7	Spring 2006	A
Question 17	Spring 2003	A
Question 28	Spring 2004	D
Question 40	Spring 2004	C

Question 12	Spring 2005	Score point	Description
		2 points	The focus of this item is to determine the validity of Caleb's statement with adequate mathematical support through work or reasoning. The response contains a scaled or labeled sketch of the hike and a mathematically correct explanation for why Caleb is wrong.
		1 point	The response provides evidence of a partially correct answer or solution process. The response shows understanding of most of the key elements of the task, but contains gaps or flaws. For example, the response may: Contain a sketch to represent the hike drawn to scale or the distances labeled with numbers, with no further work or explanation. OR Contain a sketch that is slightly flawed or incomplete and compares the two distances based on the sketch as drawn with supporting work or valid explanation. OR Contain an accurate comparison of the distance with an incorrect or missing sketch.
		0 Points	The response fails to demonstrate a minimal understanding of the task. For example, the response may: State that Caleb is wrong with no additional work that supports this conclusion.
Question 21	March 2007		B
Question 36	March 2007		B

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Benchmark E

Question 24	Spring 2009	D
Question 3	Spring 2006	A
Question 43	Spring 2003	D
Question 4	Spring 2004	C
Question 44	Spring 2004	B
Question 44	Spring 2005	C

Benchmark F

Question 44	Spring 2009			C
Question 16	March 2008	2 points	The focus of the item is to use proportions to compare two different rates. The response states that \$300 U.S. can be exchanged for \$405 Canadian in the U.S. and that she would not have received more if she had waited to exchange money with correct work or explanation of money when exchanged with the first rate and explains that the second rate would give her less money.	
		1 point	The response provides evidence of a partially correct answer and/or solution process. The response shows understanding of most of the key elements of the task but contains gaps or flaws. For example, the response may: -Indicate the correct amount of money for the first or second exchange rate but fails to or does not correctly explain how she would get less money for the second exchange rate. -State the incorrect amount for the first exchange rate but correctly explains how the second exchange rate would give her less money. -Indicate an incorrect amount for the first exchange rate, identify the correct amount for the second rate, and make a correct conclusion based on the values given in the response.	
		0 points	The response indicates inadequate understanding of the task, and the response does not meet the criteria required to earn one point. For example, the response may: -Recopy information provided in the question with no additional work toward a solution. -Be blank or the student writes "I do not know" or includes unrelated statements or work.	
Question 33	March 2008			C
Question 25	Spring 2003			Short Answer

Question 4	March 2007	<p>2 points The focus of the item is to determine the hours worked from a time card and calculate the weekly wages. The response determines Helga worked 15.5 hours and earned total wages of \$97.65.</p> <p>1 point The response provides evidence of a partially correct answer and/or solution process. The response shows understanding of some key elements of the task but contains gaps or flaws.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Identify the correct number of total hours worked, but fails to find the total wages. • Determine the total wages based on an incorrect number of hours (e.g., ignoring the fractional parts of hours, rounding off hours, or miscalculating.) However, this number is multiplied by \$6.30 to obtain the total wages based on the incorrect number of hours. • Contain a detailed explanation of the steps required, but has incorrect or missing totals. • Only state Helga's total wages are \$97.65. <p>0 points The response indicates inadequate understanding of the task and the response does not meet the criteria required to earn one point.</p> <p>For example, the response may:</p> <ul style="list-style-type: none"> • Include unrelated statements or work.
Question 9	March 2007	A