

**3rd Mathematics Achievement Test
Patterns, Functions and Algebra Standard**

Benchmark A

Question 10	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>4 point text</td> <td> The response shows: <table border="1"> <thead> <tr> <th>Week</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>Today</td> <td>12 inches</td> </tr> <tr> <td>In one week</td> <td>15 inches</td> </tr> <tr> <td>In two weeks</td> <td>18 inches</td> </tr> <tr> <td>In three weeks</td> <td>21 inches</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • 27 inches or 27 • a strategy that would lead to the correct response of 27 • 8 weeks or 8 (or 3 weeks with work showing calculation from the fifth week) based on previous work • a strategy that would lead to the correct response of 8 weeks (3 weeks) based on previous work. </td> </tr> <tr> <td>3 point</td> <td>The response correctly completes the table and all bullets.</td> </tr> <tr> <td>2 point</td> <td>The response correctly completes the table and 3 bullets. OR The response correctly completes 0-2 table entries and all 4 bullets.</td> </tr> <tr> <td>1 point</td> <td>The response correctly completes the table and 1 or 2 bullets. OR The response correctly completes 0-2 table entries and 2 or 3 bullets.</td> </tr> <tr> <td>0 point</td> <td>The response correctly completes 1 bullet. OR The response correctly completes 2 table entries.</td> </tr> </tbody> </table>	Scoring Guidelines		Points	Student Response	4 point text	The response shows: <table border="1"> <thead> <tr> <th>Week</th> <th>Height</th> </tr> </thead> <tbody> <tr> <td>Today</td> <td>12 inches</td> </tr> <tr> <td>In one week</td> <td>15 inches</td> </tr> <tr> <td>In two weeks</td> <td>18 inches</td> </tr> <tr> <td>In three weeks</td> <td>21 inches</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • 27 inches or 27 • a strategy that would lead to the correct response of 27 • 8 weeks or 8 (or 3 weeks with work showing calculation from the fifth week) based on previous work • a strategy that would lead to the correct response of 8 weeks (3 weeks) based on previous work. 	Week	Height	Today	12 inches	In one week	15 inches	In two weeks	18 inches	In three weeks	21 inches	3 point	The response correctly completes the table and all bullets.	2 point	The response correctly completes the table and 3 bullets. OR The response correctly completes 0-2 table entries and all 4 bullets.	1 point	The response correctly completes the table and 1 or 2 bullets. OR The response correctly completes 0-2 table entries and 2 or 3 bullets.	0 point	The response correctly completes 1 bullet. OR The response correctly completes 2 table entries.
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Question 12	Spring 2007	B																																

Benchmark A Continued

Question 15	Spring 2007	Scoring Guidelines		C
		Points	Student Response	
		2 point	The response shows an understanding of analyzing and extending patterns and describing the rule in words. The response provides the next number, 90, and states a correct rule. 90. Add 15.	
		1 point	The response shows a partial understanding of analyzing and extending patterns and describing the rule in words; however, the solution is incomplete or slightly flawed. Sample answer: For example, the response may: <ul style="list-style-type: none"> • Provide the next number and an incorrect rule or no rule. • State the correct rule but not find the correct next number. 	
		0 point	The response shows minimal or no understanding of analyzing and extending patterns and describing a rule in words. Sample answer: For example, the response may: <ul style="list-style-type: none"> • Provide an incorrect missing number AND an incorrect rule. • Describe the pattern as a repeating pattern (e.g., 30, 45, 60, 75, 30, because it starts over). 	
Question 28	Spring 2007			C

Benchmark B

Question 42	March 2005	Scoring Guidelines		B
		Points	Student Response	
		2	The response correctly answers \$30 or 30 AND provides correct work or strategy to support their answer. Examples of correct responses: <ul style="list-style-type: none"> • $50 - 4 - 4 - 4 - 4 - 4 = 30$ or \$30 • $4 \times 5 = 20$; $50 - 20 = 30$ or \$30 • $50 - (4 \times 5) = 30$ or \$30 	
		1	The response correctly answers \$30 or 30 OR provides correct work or strategy with a computational or counting error. OR The response shows an incomplete strategy that could lead to a correct solution. For example: $4 \times 5 = 20$ OR $50 - 4 - 4 - 4 - 4 = 34$ (incomplete strategy must be shown)	
		0	The response indicates no understanding of the concept or task.	
Question 31	March			B

Benchmark C

Question 3	May 2009	B
Question 8	March 2008	A
Question 38	March 2005	A
Question 3	Fall 2005	C
Question 40	March 2006	B
Question 3	Spring 2007	A

Benchmark D

Question 12	May 2009	B
Question 31	March 2008	B
Question 46	March 2006	A
Question 12	Spring 2007	B

Benchmark E

Question 4	March 2005	E
Question 15	Fall 2005	A
Question 45	March 2006	A

Benchmark F

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Benchmark G

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