

Ohio Grade 3 Mathematics Achievement Test

March 2006

**Answer Key
&
Scoring Guidelines**

**GRADE 3 MATHEMATICS
ANSWER KEY
MARCH 2006**

Question No.	Type	Content Standard	Content Standard Benchmark(s)	Key
1	Multiple Choice	Measurement	A	C
2	Not for Public Release			
3	Multiple Choice	Measurement	C	A
4 – 7	Not for Public Release			
8	Multiple Choice	Measurement	D	C
9	Not for Public Release			
10	Short Answer	Patterns, Functions, and Algebra	A;F	S
11 – 16	Field test questions not used in student score			
17	Multiple Choice	Number, Number Sense and Operations	B	A
18	Multiple Choice	Patterns, Functions, and Algebra	G	C
19 – 20	Not for Public Release			
21	Multiple Choice	Data Analysis and Probability	F	B
22 – 23	Not for Public Release			
24	Multiple Choice	Data Analysis and Probability	E	B
25	Short Answer	Measurement	E	S
26	Not for Public Release			
27	Multiple Choice	Number, Number Sense and Operations	D	A
28 – 30	Not for Public Release			
31	Multiple Choice	Patterns, Functions, and Algebra	B	B
32-37	Not for Public Release			
38	Short Answer	Number, Number Sense and Operations	J	S
39	Multiple Choice	Data Analysis and Probability	B	A
40	Multiple Choice	Patterns, Functions, and Algebra	C	B
41	Multiple Choice	Number, Number Sense and Operations	H	A
42	Not for Public Release			
43	Multiple Choice	Geometry and Spatial Sense	A	A
44	Multiple Choice	Data Analysis and Probability	C	B
45	Multiple Choice	Number, Number Sense and Operations	G	A
46	Multiple Choice	Patterns, Functions, and Algebra	D;E	A

Limited = 0-23; Basic = 24-33; Proficient = 34-42; Accelerated = 43-45; Advanced = 46-52
Multiple Choice = 1 point; Short Answer = 2 points; Extended Response = 4 points

10. Sam and his mom put pennies into his bank and wrote the amount in this table.

Complete the table by continuing the pattern.

Money Saved

Sam	Mom
5¢	10¢
6¢	12¢
7¢	14¢
8¢	
9¢	
10¢	
11¢	

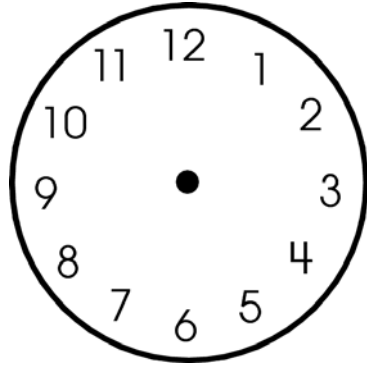
Describe the rule for this pattern.

Scoring Guidelines

Points	Student Response																
2	<p>The response completes the table with 16¢, 18¢, 20¢ and 22¢ and states a correct pattern for the table.</p> <table border="1" data-bbox="358 380 646 800"> <thead> <tr> <th data-bbox="358 380 500 428">Sam</th> <th data-bbox="500 380 646 428">Mom</th> </tr> </thead> <tbody> <tr> <td data-bbox="358 428 500 485">5¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 428 646 485">10¢</td> </tr> <tr> <td data-bbox="358 485 500 541">6¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 485 646 541">12¢</td> </tr> <tr> <td data-bbox="358 541 500 598">7¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 541 646 598">14¢</td> </tr> <tr> <td data-bbox="358 598 500 655">8¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 598 646 655">16¢</td> </tr> <tr> <td data-bbox="358 655 500 711">9¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 655 646 711">18¢</td> </tr> <tr> <td data-bbox="358 711 500 768">10¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 711 646 768">20¢</td> </tr> <tr> <td data-bbox="358 768 500 800">11¢ $\xrightarrow{\times 2}$</td> <td data-bbox="500 768 646 800">22¢</td> </tr> </tbody> </table> <p>NOTE: No penalty for omitting the ¢ sign. Examples of correct responses:</p> <ul data-bbox="537 877 1317 1203" style="list-style-type: none"> • Count by twos (2s) • Add twos (2s) • +2 • Going by twos (2s) • Sam by one, mom by two • Sam's mom saves twice the amount the Sam saves • Sam's mom saves 2¢ more each day and/or Sam saves 1¢ more each day. • Double the number 	Sam	Mom	5¢ $\xrightarrow{\times 2}$	10¢	6¢ $\xrightarrow{\times 2}$	12¢	7¢ $\xrightarrow{\times 2}$	14¢	8¢ $\xrightarrow{\times 2}$	16¢	9¢ $\xrightarrow{\times 2}$	18¢	10¢ $\xrightarrow{\times 2}$	20¢	11¢ $\xrightarrow{\times 2}$	22¢
Sam	Mom																
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9¢ $\xrightarrow{\times 2}$	18¢																
10¢ $\xrightarrow{\times 2}$	20¢																
11¢ $\xrightarrow{\times 2}$	22¢																
1	<p>The response has the table completed correctly, but rule is not stated or incorrect. OR Response gives a correct rule, but the table is not completed correctly.</p>																
0	<p>The response indicates no understanding of the concept or task.</p>																

25. Melissa left for soccer practice at 3:30 p.m. She returned home two hours later. Write the time she returned home.

Show the return time on the clock.



Scoring Guidelines

Points	Student Response
2	The response states the correct time of 5:30 and draws the hours and minutes hands accurately on the clock. 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.
1	The response states the correct time OR shows the correct elapsed time (5:30) on the clock. OR The response draws the hours and minutes hands correctly for the time given. Example: 1:30, hands drawn to accurately reflect 1:30
0	The response indicates no understanding of the concept or task.

38. Is 300 a reasonable estimate for $726 - 192$? _____

Show or explain why or why not.

Scoring Guidelines

Points	Student Response
2 point text	Correct response is indicated as NO and a valid estimation strategy to find an estimate between 500 and 600, inclusive. Examples of correct responses: <ul style="list-style-type: none">• No, because $700 - 200 = 500$.• No, $726 - 192 = 534$ and that's not close to 300.• $700 - 200 = 500$ (nearest hundred)• $700 - 100 = 600$ (front-end estimation)• $730 - 190 = 540$ (nearest ten)• $725 - 200 = 525$ (friendly numbers)
1	Correct response is indicated as NO with no strategy or support given. OR Response is given as YES or is not given with a valid estimation strategy. The estimation strategy may have an error.
0	Response does not state NO and finds an exact answer without an explanation. OR Response indicates no understanding of the concept or task.