

**NEW YORK STATE  
COMPONENT RETEST**

**MATHEMATICS A  
COMPONENT 6  
MODULE 2**

**FRIDAY, MAY 20, 2005**

**SCORING KEY  
AND  
RATING GUIDE**

**Multiple Choice Key**

(1)	2
(2)	1
(3)	3
(4)	3
(5)	4
(6)	2

**Math A Component Retest**  
**May 2005**  
**Component 6, Module 2**

**Rubrics**

(7)

- [ 4 ] A correct list or tree diagram showing all 24 possible combinations is provided and  $\frac{15}{24}$  or an equivalent probability is found.
- [ 3 ] Appropriate work is shown, but one computational or counting error is made.
- [ 2 ] Appropriate work is shown, but two or more computational or counting errors are made.
- or*
- [ 2 ] Appropriate work is shown, but one conceptual error is made, such as not including the sandwich that has both ham and cheddar cheese.
- or*
- [ 2 ] A correct list or tree diagram is provided and 15, but the answer is not expressed as a probability.
- or*
- [ 2 ] An incorrect or partially correct sample space or list is provided, but the appropriate probability is found for that sample space.
- or*
- [ 2 ] The correct sample space is shown, but the probability is found to be  $\frac{18}{24}$ , the probability of ham  $\left(\frac{6}{24}\right)$  plus the probability of cheddar  $\left(\frac{12}{24}\right)$ .
- [ 1 ] Only the correct sample space is provided.
- or*
- [ 1 ] An incorrect or partially correct sample space or list is provided and an appropriate number of sandwiches is found, but no further correct work is shown.
- or*
- [ 1 ]  $\frac{15}{24}$ , but no work is shown.
- [ 0 ] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

(8)

[ 4 ] 98%, and appropriate work is shown, such as finding that the area of the entire lot is 60,000, subtracting the areas of the tent (600) and the pool ( $12^2\pi$ ), and then computing a percent.

[ 3 ] Appropriate work is shown, but one computational or rounding error is made.

*or*

[ 3 ] Appropriate work is shown, but the probability is not expressed as a percent.

*or*

[ 3 ] The probability of hitting a structure (2%) is found, and appropriate work is shown.

[ 2 ] Appropriate work is shown, but two or more computational or rounding errors are made.

*or*

[ 2 ] Appropriate work is shown, but one conceptual error is made.

*or*

[ 2 ] All the areas are found correctly and the subtraction is performed correctly, but no probability is found.

[ 1 ] Appropriate work is shown, but one conceptual error and one computational or rounding error are made.

*or*

[ 1 ] The areas of the lot and both structures are found correctly, but no further correct work is shown.

*or*

[ 1 ] 98%, but no work is shown.

[ 0 ] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.

(9)

[ 4 ] \$1.07, and appropriate work is shown, such as solving the equation  $\frac{2x + 1}{7x + 1} = \frac{1}{3}$  or using trial and error to find the number of coins with at least three trials and appropriate checks.

[ 3 ] Appropriate work is shown, but one computational error is made.

*or*

[ 3 ] Appropriate work is shown and the number of each type of coin is found, but the total value of the coins is not calculated.

[ 2 ] Appropriate work is shown, but two or more computational errors are made.

*or*

[ 2 ] Appropriate work is shown, but one conceptual error is made.

*or*

[ 2 ] An incorrect equation of equal difficulty is solved appropriately, and an appropriate value for the coins is found.

*or*

[ 2 ] \$1.07, and the trial-and-error method is used to find the number of coins, but only two trials and appropriate checks are shown.

*or*

[ 2 ] The trial-and-error method is attempted and at least six systematic trials and appropriate checks are shown, but no solution is found.

*or*

[ 2 ] A correct equation is solved for  $x$ , but no further correct work is shown.

[ 1 ] Appropriate work is shown, but one conceptual error and one computational error are made.

*or*

[ 1 ] A correct equation is written, but no further correct work is shown.

*or*

[ 1 ] \$1.07, but no work or only one trial with an appropriate check is shown.

[ 0 ] 2 pennies, 5 nickels, and 8 dimes, but no work is shown.

*or*

[ 0 ] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously incorrect procedure.