

**NEW YORK STATE  
COMPONENT RETEST**

**MATHEMATICS A  
COMPONENT 6  
MODULE 2**

**THURSDAY, APRIL 29, 2004**

**SCORING KEY  
AND  
RATING GUIDE**

**Multiple Choice Key**

<b>1</b>	<b>3</b>
<b>2</b>	<b>1</b>
<b>3</b>	<b>4</b>
<b>4</b>	<b>3</b>
<b>5</b>	<b>1</b>
<b>6</b>	<b>2</b>

**Math A Component Retest**  
**April 2004**  
**Component 6, Module 2**

**Key to Multiple-Choice Questions**

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

**Rubrics**

(7)

[ 4 ]  $\frac{11}{26}$ , and appropriate work is shown, such as  $2y + y + 6 + y = 26$  or trial and error with at least three trials and appropriate checks.

[ 3 ] One computational error is made in finding the number of marbles, but an appropriate probability is found.

*or*

[ 3 ] The correct number of each color marble is found, and appropriate work is shown, but  $\frac{5}{26}$ , the probability of selecting a yellow marble, or  $\frac{10}{26}$ , the probability of selecting a purple marble, is given as the answer.

[ 2 ] Two or more computational errors are made in finding the number of marbles, but an appropriate probability is found.

*or*

[ 2 ] The number of green marbles is found correctly with appropriate work shown, but the probability is not found.

*or*

[ 2 ]  $\frac{11}{26}$ , and the trial-and-error method is used to find the correct number of marbles, but only two trials with 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 the solution is not found.

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

*or*

[ 1 ]  $P(\text{green}) = \frac{y + 6}{26}$ , but no other correct work is shown.

*or*

[ 1 ]  $\frac{11}{26}$ , but no work is shown or only one trial with appropriate check is used to find the correct number of marbles.

[ 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 ]  $\frac{12}{36}$  or an equivalent answer, and appropriate work is shown, such as  $\frac{4}{6} \cdot \frac{3}{6}$ .

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

[ 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, such as adding  $\frac{4}{6}$  and  $\frac{3}{6}$ .

*or*

[ 2 ] One of the probabilities is incorrect, but the appropriate product is shown.

*or*

[ 2 ] The correct probabilities are determined, but the product is not found.

[ 1 ] One of the probabilities is correct, but no further correct work is shown.

*or*

[ 1 ] Both probabilities are incorrect, but the appropriate product is found.

*or*

[ 1 ]  $\frac{12}{36}$ , 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 ]  $\frac{160}{462}$  or an equivalent answer, and appropriate work is shown, such as adding  
 $P(C,C) = \frac{6}{22} \cdot \frac{5}{21} = \frac{30}{462}$ ,  $P(N,N) = \frac{5}{22} \cdot \frac{4}{21} = \frac{20}{462}$ , and  $P(S,S) = \frac{11}{22} \cdot \frac{10}{21} = \frac{110}{462}$ .

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

[ 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, such as calculating the probability with replacement,  $\frac{6}{22} \cdot \frac{6}{22} + \frac{5}{22} \cdot \frac{5}{22} + \frac{11}{22} \cdot \frac{11}{22}$ .

*or*

[ 2 ] All three probabilities are calculated correctly, but they are not added.

*or*

[ 2 ] One of the probabilities is set up incorrectly, but all three are added appropriately.

*or*

[ 2 ] All three probabilities are calculated correctly, but they are multiplied.

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

*or*

[ 1 ] The probabilities are set up incorrectly, but they are added appropriately.

*or*

[ 1 ] One probability is calculated correctly, but no further correct work is shown.

*or*

[ 1 ]  $\frac{160}{462}$  or an equivalent answer, 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.