

**NEW YORK STATE  
COMPONENT RETEST**

**MATHEMATICS A  
COMPONENT 6  
MODULE 2**

**TUESDAY, MAY 19, 2009**

**SCORING KEY  
AND  
RATING GUIDE**

**Multiple Choice Key**

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

**Math A Component Retest**  
**May 2009**  
**Component 6, Module 2**

**Key to Multiple-Choice Questions**

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

**Rubrics**

(7)

[4]  $\frac{136}{300}$  or an equivalent answer, and appropriate work is shown, such as  $\frac{{}^{14}C_2 + {}^{10}C_2}{{}^{25}C_2}$  or

$$\frac{14}{25} \cdot \frac{13}{24} + \frac{10}{25} \cdot \frac{9}{24}.$$

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

*or*

[3] The two probabilities are found correctly, and appropriate work is shown, but they are not added.

*or*

[3] 300 and 136, and appropriate work is shown, but no probability is written.

[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 multiplying the probabilities.

*or*

[2] An incorrect expression of equal difficulty is written and evaluated appropriately.

*or*

[2] A correct expression for the probability is written, but no further correct work is shown.

*or*

[2] Either  $P(2 \text{ historical novels})$  or  $P(2 \text{ biographies})$  is calculated correctly, but no further correct work is shown.

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

*or*

[1]  $\frac{136}{300}$  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.

(8)

[4] A correct sketch is drawn and labeled, blue = 60, red = 120, white = 180, and  $\frac{1}{6}$ , and appropriate work is shown.

[3] Appropriate work is shown, but one computational error is made, but appropriate answers are found and the sketch is drawn and labeled appropriately.

*or*

[3] Appropriate work is shown to find the measures of the central angles and  $\frac{1}{6}$ , but no sketch or an incorrect sketch is drawn.

*or*

[3] Appropriate work is shown, and a correct sketch is drawn that includes correctly labeled central angles, but the probability is not found or is found incorrectly.

[2] Appropriate work is shown, but two or more computational errors are made, but appropriate answers are found and the sketch is drawn and labeled appropriately.

*or*

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

*or*

[2] Blue = 60, red = 120, white = 180, and  $\frac{1}{6}$ , but no work is shown.

*or*

[2] A correct sketch is drawn and appropriate work is shown to find  $\frac{1}{6}$ , but the central angles are not found or are found incorrectly.

*or*

[2] Appropriate work is shown to find the correct measures of the central angles, 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 sketch is drawn that includes correctly labeled colors, but no further correct work is shown.

*or*

[1]  $\frac{1}{6}$ , and appropriate work is shown, but the spinner is not divided or labeled, and the measures of the central angles are not found or are found incorrectly.

[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]  $\frac{420}{1001}$  or an equivalent answer, and appropriate work is shown, such as  $\frac{{}_6C_2 \cdot {}_8C_2}{{}_{14}C_4}$ .

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

*or*

[3]  $\frac{{}_6C_2 \cdot {}_8C_2}{{}_{14}C_4}$  is written, but not evaluated.

[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]  ${}_6C_2$ ,  ${}_8C_2$ , and  ${}_{14}C_4$  are all evaluated, but no further correct work is shown.

*or*

[2]  ${}_6C_2 \cdot {}_8C_2$  is evaluated, but no further correct work is shown.

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

*or*

[1]  ${}_6C_2 \cdot {}_8C_2$  is written, but no further correct work is shown.

*or*

[1]  ${}_{14}C_4$  is evaluated, but no further correct work is shown.

*or*

[1]  ${}_{14}C_4$ ,  ${}_6C_2$ , and  ${}_8C_2$  are written, but no further correct work is shown.

*or*

[1]  $\frac{420}{1001}$  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.