MCAP Maryland Comprehensive Assessment Program

Practice Test Answer and Alignment Document
Mathematics – Grade 6
Pencil-and-Paper

The following pages include the answer keys for all machine-scored items. A sample student response for the top score is included for all hand-scored constructed response items.

- Some answer keys include one possible sample student response. Other valid methods for solving the problem can earn full credit unless a specific method is required by the item.
- In items where the scores are awarded for full and partial credit, the definition of partial credit will be confirmed during range-finding (reviewing sets of real student work).
- If students make a computation error, they can still earn points for reasoning or modeling.

Section 1

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	6.NS.B.3-2
2.	-0.29	6.NS.C.6c-1
3.	B	6.RP.A.1
4.	C	6.NS.B.3-3
5.	A, D	6.EE.A.4
6.	D	6.NS.C.8
7.	A	6.EE.B.8
8.	D	6.NS.A.1
9.	66	6.EE.A.1-2
10.	C	6.NS.B.4-2
11.	B	6.EE.B.6
12.	D	6.NS.C.7c-1
13.	A	6.NS.B.2

Section 2

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	B	6.G.A.2-1
2.	D	6.RP.A.3d
3.	D	6.R.2c 6.NS.C.7d
4.	A	6.M.5 6.EE.C.9
5.	**Sample Top Score Response** A rate of 2 chairs every 10 minutes is equivalent to 1 chair every 5 minutes. To make 5 chairs, a time of $5 \times 5 = 25$ minutes is required. Since 2 chairs are made every 10 minutes, the value $32 \div 2 = 16$ should be multiplied by 10. $16 \times 10 = 160$, so 160 minutes are required to make 32 chairs. **Refer to the Holistic Rubric for 4-Point Reasoning Constructed Response Items for score point information.**	6.R.1a 6.RP.A.3b
6.	D	6.M.4 6.EE.C.9
7.	C	6.SP.B.5
8.	C	6.EE.A.2a

Section 3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	6.EE.B.5-2
2.	3	6.SP.B.4
3.	**Sample Top Score Response** The painter did not multiply the mixed numbers correctly. The painter incorrectly multiplied the whole numbers together and the fractions together, then added the sums. $2\frac{1}{2} \times 3\frac{1}{2} = \frac{5}{2} \times \frac{7}{2} = \frac{35}{4}$ $2\frac{1}{2} \times 4\frac{1}{2} = \frac{5}{2} \times \frac{9}{2} = \frac{45}{4}$ $3\frac{1}{2} \times 4\frac{1}{2} = \frac{7}{2} \times \frac{9}{2} = \frac{63}{4}$ Also, the painter did not multiply the mixed numbers by 2 to account for there being 2 of each face. The total surface area is $2\left(\frac{35}{4}\right) + 2\left(\frac{45}{4}\right) + 2\left(\frac{63}{4}\right) = \frac{286}{4} =$ $71\frac{1}{2}$ square feet	6.M.1 6.G.A.4
4.	30	6.RP.A.3b

Item Number	Answer Key	Evidence Statement Key/ Content Scope
5.	**Sample Top Score Response** The mistake was using the reciprocal of both fractions and not only the divisor. To find *x*, the number of portions in the jar, divide $\frac{3}{4}$ by $\frac{1}{10}$. $x = \frac{3}{4} \div \frac{1}{10} = \frac{3}{4} \cdot \frac{10}{1} = \frac{30}{4} = 7\frac{1}{2}$ There will be 7 whole portions of glitter. **Refer to the Holistic Rubric for 3-Point Reasoning Constructed Response Items for score point information.**	6.R.2b 6.NS.A.1
6.	C	6.R.3a 6.EE.A.3
7.	B, E	6.M.3 6.RP.A.3b 6.EE.C.9

Section 4

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	C	6.G.A.1
2.	B	6.EE.C.9
3.	D	6.R.3b 6.EE.B.7
4.	**Sample Top Score Response** The length of 2-inch wood needed is $2(18 + 2 + 2) + 2(24) = 92$ inches. The areas of the top and bottom pieces are each $2 \times 22 = 44$ square inches. The areas of the side pieces are each $2 \times 36 = 72$ square inches. The total area is $44 + 44 + 72 + 72 = 232$ square inches. **Refer to the Holistic Rubric for 4-Point Modeling Constructed Response Items for score point information.**	6.M.1 6.EE.B.6
5.	B	6.R.1a 6.RP.A.3a
6.	B, C, E	6.M.2 6.RP.A.3b
7.	A	6.EE.B.7