MCAP
Maryland Comprehensive Assessment Program

Practice Test Answer and Alignment Document
Mathematics: Grade 6

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.	B	6.NS.B.2
2.	9	6.EE.A.1-2
3.	D	6.NS.C.7c-1
4.	B	6.EE.B.8
5.	A	6.NS.B.3-2
6.	B	6.EE.B.6
7.	A, C, D	6.RP.A.1
8.	D	6.NS.A.1
9.	C	6.NS.B.4-2
10.	A, D	6.EE.A.4
11.	A	6.NS.C.6c-1
12.	D	6.NS.C.8
13.	C	6.SP.A.2
14.	C	6.NS.B.3-3

Section 2

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	6.EE.B.5-2
2.	60	6.G.A.2-1
3.	D	6.M.1 6.EE.C.9 6.M.1c
4.	**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
5.	A	6.M.1 6.EE.C.9 6.M.1d
6.	D	6.R.2c 6.NS.C.7d
7.	125	6.RP.A.3c-2

Section 3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	D	6.RP.A.3b
2.	B	6.EE.C.9
3.	**<u>Sample Top Score Response</u>** 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. $$2\frac{1}{2} \times 3\frac{1}{2} = \frac{5}{2} \times \frac{7}{2} = \frac{35}{4}$$ $$2\frac{1}{2} \times 4\frac{1}{2} = \frac{5}{2} \times \frac{9}{2} = \frac{45}{4}$$ $$3\frac{1}{2} \times 4\frac{1}{2} = \frac{7}{2} \times \frac{9}{2} = \frac{63}{4}$$ 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. **Refer to the Holistic Rubric for 3-Point Modeling Constructed Response Items for score point information.**	6.M.1 6.G.A.2-2 6.G.A.4 6.M.1e
4.	C	6.R.3a 6.EE.A.3

Item Number	Answer Key	Evidence Statement Key/ Content Scope
5.	**<u>Sample Top Score Response</u>** 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 $\dfrac{3}{4}$ by $\dfrac{1}{10}$. $x = \dfrac{3}{4} \div \dfrac{1}{10} = \dfrac{3}{4} \times \dfrac{10}{1} = \dfrac{30}{4} = 7\dfrac{1}{2}$ 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.	D	6.M.1 6.RP.A.3b 6.M.1c
7.	6	6.SP.B.5

Section 4

Item Number	Answer Key	Evidence Statement Key/ Content Scope
1.	A	6.EE.A.2a
2.	A, B, E	6.G.A.3
3.	B	6.R.1a 6.RP.A.3a
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 6.M.1b 6.M.1c
5.	B	6.R.3b 6.EE.B.5-1
6.	B, C, E	6.M.1 6.M.1a 6.RP.A.3b
7.	A	6.EE.B.7