Practice Test Answer and Alignment Document
Mathematics – Grade 8

Part A

Item Number	Answer Key	Kentucky Academic Standard	Mathematical Practices
1.	**D**	KY.8.NS.1	MP.7
2.	**B, D**	KY.8.F.1	MP.6, MP.7, MP.8
3.	**C**	KY.8.NS.2	MP.7
4.	**B, E**	KY.8.G.1	MP.6

Part B

Item Number	Answer Key	Kentucky Academic Standard	Mathematical Practices
1.	**D**	KY.8.EE.4	MP.5, MP.7, MP.8
2.	**A**	KY.8.F.5.b	MP.7
3.	See rubric	KY.8.EE.8.c	MP.1, MP.3, MP.4
4.	**C**	KY.8.SP.1	MP.2, MP.7
5.	See rubric	KY.8.G.9	MP.1, MP.6, MP.7
6.	**B**	KY.8.SP.3	MP.2

Rubrics

Part B #3	
Rubric	
Score Point 4	Student scores 4 points.
Score Point 3	Student scores 3 points.
Score Point 2	Student scores 2 points.
Score Point 1	Student demonstrates a minimal understanding of how to solve a real-world problem leading to two linear equations in two variables.
Score Point 0	Student response is insufficient to demonstrate a grade-appropriate, relevant understanding of the task.
Score Points	- Score 4 points: - Valid explanation of each equation in the system in terms of the situation **AND** - Correct solution, $b = 4$ and $C = 80$ **AND** - Valid work or explanation shown **AND** - Valid explanation of the solution in terms of the situation. - Score 3 points: - Any three parts of the question are complete and correct **OR** - A computation error leading to an incorrect value for the first variable found, and a value of the second variable that is correct based on the incorrect first variable, and correct explanations for the equations in the system and the solution based on the value of C and b - Score 2 points: - Any two parts of the question are complete and correct. - Score 1 point: - Any one part of the question is complete and correct **OR** - Other partial explanation that demonstrates a minimal understanding of the task.
Correct Answer	The first equation means Store J charges $70.00 for delivery, plus $2.50 per balloon delivered. The second equation means that store K charges $60.00 for delivery, plus $5.00 per balloon delivered. $2.5b + 70 = 5b + 60$ $10 = 2.5b$ $\dfrac{10}{2.5} = b$ $b = 4$ $C = 2.5(4) + 70 = 80$ $C = 80$ The solution represents that when Vincent buys 4 balloons the cost will be $80 at both stores.

Part B #5	
Rubric	
Score Point 2	Student demonstrates a complete understanding of applying the formula for the volume of a cylinder and using it to solve a real-world problem.
Score Point 1	Student demonstrates a partial understanding of applying the formula for the volume of a cylinder and using it to solve a real-world problem.
Score Point 0	Student response is completely incorrect or irrelevant.
Score Points	- Score 2 points: - Correct answer, including units, with all work or explanation provided. - Score 1 point: - Correct answer, not including units, with all work or explanation provided. **OR** - Correct answer, including units, with partial work or explanation provided. **OR** - Correct answer, not including units, with partial work or explanation provided. **OR** - Work or explanation provided shows a partial understanding of how to apply the formula in a real-world problem.
Correct Answer	$26 - 1 = 25$ $V = \pi \times 8^2 \times 25 \cong 5026.55$ $\dfrac{3}{4} \times 5026.55 \cong 3769.99$ $\dfrac{3770}{5} = 628\dfrac{1}{3}$ There was an average of $628\frac{1}{3}$ cubic inches of water used per hour. Note: Answers between, and including, 628 and 629 are acceptable.