Practice Test Answer and Alignment Document Mathematics - Grade 7

## Part A

| Item <br> Number | Answer Key | Kentucky <br> Academic <br> Standard | Mathematical <br> Practices |
| :---: | :--- | :--- | :--- |
| 1. | C | KY.7.NS.1.d | MP.2, MP.7 |
| 2. | See rubric | KY.7.RP.2 | MP.1, MP.2 |
| 3. | A | KY.7.EE.1 | MP.7 |
| 4. | C | KY.7.NS.2.C | MP.6, MP.7 |

## Part B

| Item <br> Number | Answer Key | Kentucky <br> Academic <br> Standard | Mathematical <br> Practices |
| :---: | :--- | :--- | :--- |
| 1. | B, E | KY.7.RP.2.d | MP.1, MP.2 |
| 2. | C | KY.7.G.6.a | MP.5 |
| 3. | A | KY.7.SP.2.c | MP.2 |
| 4. | A | KY.7.EE.4.b | MP.2, MP.4 |
| 5. | See rubric | KY.7.EE.4.b | MP.2, MP.4 |
| 6. | C | KY.7.G.4.a | MP.1, MP.2, <br> MP.8 |

## Rubrics

| Part A \#2 |  |
| :---: | :---: |
| 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 identifying the constant of proportionality (unit rate) in a graph and verbal description of a proportional relationship. |
| Score Point 0 | Student response is insufficient to demonstrate a grade-appropriate, relevant understanding of the task. |
| Score Points | Part A <br> - Score 2 points: <br> - Valid ordered pairs and correct constant of proportionality. <br> - Score 1 point: <br> - Valid ordered pairs OR <br> - Correct constant of proportionality. <br> Part B <br> - Score 2 points: <br> O Correct answer with complete work shown or explanation using answers in Part A. OR <br> - Incorrect reasonable answers based on incorrect answers in Part A with complete work shown or explanations provided. <br> - Score 1 point: <br> - Correct answer with no work shown or explanation provided. OR <br> O Incorrect reasonable answers based on incorrect answers in Part A with no work shown or explanations provided. |
| Correct <br> Answer | Part A <br> I identified $(2,10)$ and $(6,30)$ to represent the relationship between time, $x$, and the total amount of water, $y$, in the pool. The constant of proportionality is 5 gallons of water per minute. <br> Note: Other reasonable explanations are acceptable. <br> Part B <br> The total amount of water in the pool after 47 minutes is 235 gallons. $\frac{10}{2}=\frac{y}{47}$ |

## Part B \#5

## 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 solving a word problem leading to an inequality of the form $\boldsymbol{p} \boldsymbol{x}+\boldsymbol{q} \leq \boldsymbol{r}, \boldsymbol{g r a p h i n g}$ the solution set, and interpreting it in terms of the context. |
| Score Point 0 | Student response is insufficient to demonstrate a grade-appropriate, relevant understanding of the task. |
| Score Points | Part A <br> - Score 2 points: <br> - Correct inequality and the correct solution with complete work shown. <br> - Score 1 point: <br> O Correct inequality and the correct solution with partial or no work shown. OR <br> O Correct inequality with an incorrect solution and complete work shown. OR <br> Part B <br> - Score 2 points: <br> - Correct description and correct answer. <br> - Score 1 point: <br> - Correct description OR <br> - Correct answer. |
| Correct Answer | $\begin{aligned} & \text { Part A } \\ & 24 n+144 \leq 300 \\ & 24 n \leq 156 \\ & n \leq 6.5 \end{aligned}$ <br> Part B <br> The number line will have a closed circle at 4 with a line and arrow pointing to the left towards 0 . Chris can play 4 games or any whole number of games less than 4. <br> Note: Other reasonable explanations acceptable. |

