This document contains the answer keys and rubrics for the LEAP 2025 Grade 7 Mathematics Practice Test.

Session 1				
Task #	**Task Type**	**Value (points)**	**Key**	**Alignment**
1	I	1	B, E	7.EE.A.2
2	I	1	B	7.NS.A.2a
3	I	1	10	7.EE.B.4a
4	I	1	A	7.RP.A.2c
5	I	1	D	7.NS.A.3
6	I	1	C	7.NS.A.1b
7	I	1	A	7.EE.B.4b
8	I	1	D	7.NS.A.2b
9	I	1	1.07	7.RP.A.2b
10	I	1	C	7.NS.A.1c
11	I	1	D	7.RP.A.2d
12	I	1	$7/8 - (-2 + 3/4) = ($ **2** $+$ **-3/4** $) + 7/8$	7.NS.A.1d
13	I	1		7.EE.A.1
14	I	1	15; 18	7.EE.B.4a
15	I	1	2.25	7.EE.B.4a
16	I	1	The number with the least value is **n – p**, and the number with the greatest value is **p – n**.	7.NS.A.1b
17	I	1	-54	7.NS.A.3
18	I	1	B	7.EE.B.4a
19	I	1	24	7.RP.A.2b
20	I	1	A, D, E	7.EE.A.1

Session 2				
Task #	Task Type	Value (points)	Key	Alignment
21	I	1	B	7.SP.C.7a
22	I	1	A, E	7.G.A.3
23	I	1	C	7.RP.A.1
24	I	1	B	7.SP.B.4
25	I	1	A, E	7.RP.A.2a
26	I	1	A hamburger patty has approximately [5.7 ▼] grams of protein per ounce. The fish has approximately [5.3 ▼] grams of protein per ounce.	7.RP.A.1
27	I	2	Part A: B Part B: 20000	7.RP.A.3
28	III	3	rubric	LEAP.III.7.4 (7.NS.A.3, 7.EE.B.3)
29	III	3	rubric	LEAP.III.7.1 (7.EE.B.4a)
30	II	3	rubric	LEAP.II.7.2 (7.NS.A.1b)
31	I	2	Part A: A, B, E Part B: A, D, E	7.G.A.2
32	II	4	Part A: rubric Part B: rubric	LEAP.II.7.6 (6.NS.C.6b, 6.NS.C.8)

Session 3				
Task #	Task Type	Value (points)	Key	Alignment
33	I	1	18; 44	7.G.B.6
34	I	1	B	7.SP.A.1
35	I	1	A, D	7.RP.A.2a
36	II	3	rubric	LEAP.II.7.5 (7.EE.B.4a)

Session 3				
Task #	Task Type	Value (points)	Key	Alignment
37	I	1	Least Likely Arrow lands on a section labeled with the number 1. Arrow lands on a section labeled with an odd number. Arrow lands on a section labeled with a number less than 4. Most Likely Note: This item presents horizontally online.	7.SP.C.5
38	I	2	Part A: B Part B: 72	7.RP.A.3
39	I	1	B	7.SP.C.6
40	I	2	Part A: 68.40 Part B: 456	7.EE.B.3
41	I	1	<table><tr><td></td><td>Cube</td><td>Right-Square Pyramid</td></tr><tr><td>Triangle</td><td>☐</td><td>✔</td></tr><tr><td>Square</td><td>✔</td><td>✔</td></tr><tr><td>Rectangle That Is Not a Square</td><td>✔</td><td>☐</td></tr></table>	7.G.A.3
42	II	4	Part A: rubric Part B: rubric	LEAP.II.7.4 (7.RP.A.2a)
43	III	6	Part A: rubric Part B: rubric	LEAP.III.7.2 (6.RP.A.2, 6.RP.A.3, 6.EE.C.9)

RUBRICS

Score	Description
Task # 28	
Score	Description
3	Student response includes the following 3 elements: • **Computation component**: 1 point o Acceptable approximate number of people who will receive a small prize, range from 900 to 1,200 people • **Modeling component**: 2 points o Models a valid estimation strategy for determining the number of people who will attend this year's fair, range of 14,000 to 17,000 o Models finding the approximate number of people who will receive a prize Sample Student Response: I saw that the attendance was increasing each year and found the average amount that it increased by each year. (1,087 + 1,763 + 1,176)/3 = 4,026/3 So I estimate that the attendance this year will increase by about 1,342 people and will be 14,646 people. 20% of 14,646 is 0.20(14,468) = 2,929.2 $\frac{1}{3}$ of 2,929.2 is $(2,929.2)(\frac{1}{3})$ = (2,929.2)/3 = 976.4 So about 976 people will receive a small prize. Note: Accept other valid estimation strategies for determining this year's attendance.
2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Task #29

Score	Description

3	Student response includes the following 3 elements:
	
	• **Modeling component**: 2 points
	    o Correct equation
	    o Valid explanation or work
	• **Computation component**: 1 point
	    o Correct price of one museum ticket, 8
	
	Sample Student Response:
	$4(x + 1.50) = 38$ or equivalent
	$4x + 6 = 38$
	$4x = 32$
	$x = 8$
	
	The cost of one ticket is \$8.

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Task #30

Score	Description

3	Student response includes the following 3 elements:
	
	• **Reasoning component**: 2 points
	    o Valid statement about the value of x
	    o Valid explanation about the statement regarding the value of x
	• **Computation component**: 1 point
	    o Valid example, using numbers, that supports the explanation
	
	Sample Student Response:
	I know that $5 + (-5) = 0$. Then, 5 plus any number less than -5 will be negative. So, the value of x must be less than -5 if n is a negative number ($x < -5$ can be used as the statement). An example that shows this is true is $5 + (-6) = -1$, and this works for any number less than -5.

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Task #32
Part A

Score	Description

2	Student response includes the following 2 elements:
	
	• **Computation component:** 1 point
	    ○ Correct computation, numerical support, or graphical support that is consistent with the student's reasoning
	• **Reasoning component**: 1 point
	    ○ Correctly reasons that the lengths of the sides of the quadrilateral *JKLM* are not all the same, so it cannot be a square
	
	Sample Student Response:
	In a square, the lengths of all four sides are the same. If quadrilateral *JKLM* is a square, all four of its side lengths would be the same. Since the *y*-coordinates are the same in points *J* and *K*, the side length of *JK* is the positive difference between the *x*-coordinates of each point. So, $JK = \lvert-4.5 - (-1.2)\rvert = \lvert-4.5 + 1.2\rvert = \lvert-3.3\rvert = 3.3$ units. Similarly, the side length of *KL* is the positive difference between the *y*-coordinates of each point. So, $KL = \lvert3 - 8.7\rvert = \lvert-5.7\rvert = 5.7$ units. The lengths of two sides of the quadrilateral are not equal, so quadrilateral *JKLM* is not a square.
	
	Notes:
	• The student may still receive credit for this part if the student chooses to compute or compare side lengths without using absolute values.
	• The student may receive a total of 1 point for Part A if the reasoning processes are correct but the student makes one or more computational errors resulting in incorrect answers or an incorrect conclusion.
	• The student may receive the 1 computation point if the correct answer is computed but shows no work or insufficient work to indicate a correct reasoning process.

1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

	Task #32
	Part B
Score	**Description**

2	Student response includes the following 2 elements:
	• **Computation component:** 1 point
	    ○ Correct new coordinates for points *L* and *M*
	• **Reasoning component**: 1 point
	    ○ Correctly reasons why the two new coordinates of points *L* and *M* would make quadrilateral *JKLM* a square
	    Note: Numerical or graphical support that is consistent with the student's reasoning is acceptable for full credit.
	
	Sample Student Response:
	The given coordinates form a rectangle with sides *JK* and *LM* both 3.3 units and sides *KL* and *JM* both 5.7 units. If the coordinates of points *L* and *M* change so that quadrilateral *JKLM* is a square, they should be lowered on the coordinate plane 5.7 – 3.3, or 2.4 units. This will change sides *KL* and *JM* from 5.7 units to 3.3 units, making the resulting quadrilateral a square. Lowering points on a coordinate plane changes their *y*-coordinates. So, the new coordinates of point *L* would be (-1.2, 6.3) since 8.7 – 2.4, or 6.3. The new coordinates of point *M* would be (-4.5, 6.3) since 8.7 – 2.4, or 6.3 units.
	
	Notes:
	• The student should receive credit for this part if the student chooses new coordinates for points L and M that are below points J and K, as long as the student shows or explains that the side lengths of all four sides are the same length.
	• The student may receive a total of 1 point for Part B if the reasoning processes are correct but the student makes one or more computational errors resulting in incorrect answers or an incorrect conclusion.
	• The student may receive the 1 computation point if the correct answer is computed but shows no work or insufficient work to indicate a correct reasoning process.

1	Student response includes 1 of the 2 elements.
0	Student response is incorrect or irrelevant.

Task #36	
Score	**Description**

3	Student response includes the following 3 elements:
	• **Computation component**: 1 point
	    ○ Correctly determines the value of x
	• **Reasoning component**: 2 points
	    ○ Correctly uses an equation to determine the monthly savings goal
	    ○ Correctly writes a sentence to explain the solution
	
	Sample Student Response:
	$350 = 12(x + 20)$
	$29.1\overline{6} = x + 20$
	$9.1\overline{6} = x$
	$\$9.17 = x$
	
	The student has to save an additional \$9.17 per month to reach his goal of saving \$350 in 12 months.

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Task #42	
Part A	
Score	Description
1	Student response includes the following element: • **Reasoning component:** 1 point o Correct explanation of why the graph represents a proportional relationship Sample Student Response: The graph represents a proportional relationship between the variables *d* and *t* because the ratio of *d* to *t* is always the same number.
0	Student response is incorrect or irrelevant.
Part B	
Score	Description

3	Student response includes the following 3 elements:
	
	• **Computation component**: 1 point
	    o Correct identification of the relationship of distance and time as proportional for the white car and not proportional for the red car
	• **Reasoning component**: 2 points
	    o Correct explanation, using the table, of why each relationship is proportional or not proportional
	    o Correct explanation of how the graph of each relationship would support the previous answer
	
	Sample Student Response:
	The relationship between distance and time is proportional for the white car, but not proportional for the red car. The ratio of miles traveled to hours traveled for the white car is the same for each row (55 miles per hour). The ratio of miles traveled to hours traveled for the red car is not the same for each row ($\frac{77}{1}$ = 77, and $\frac{122}{2}$ = 61). The graph of the white car relationship would form a straight line that passes through the origin, so this supports my answer that it is a proportional relationship. The graph of the red car relationship would also pass through the origin, but does not form a straight line. This also supports my answer that the red car relationship is not a proportional relationship.

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Task #43
Part A

Score	Description

3	Student response includes the following 3 elements:
	
	• **Computation component**: 1 points
	     o Correct amount of money received for each work-related mile driven, $0.51
	• **Modeling component**: 2 points
	     o Explanation of how to find the amount of money received for any number of work-related miles driven
	     o Correct equation based on the explanation given
	
	Sample Student Response:
	Since the table shows a proportional relationship, I can divide the amount of money received by the distance driven for any of the rows in the table. The worker received $0.51 for each work-related mile driven. The equation that represents this is $y = 0.51x$ (or equivalent).

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.

Part B

Score	Description

3	Student response includes the following 3 elements:
	
	• **Computation component**: 2 points
	     o Correct number of work-related miles driven, 63
	     o Correct percent of total miles driven: 47% (or correct calculation based on incorrect number of work-related miles driven)
	• **Modeling component**: 1 point
	     o Correct explanation given or work shown
	
	Sample Student Response:
	The percent of total miles is found by dividing the work-related miles driven by the total number of miles driven. So, I must first determine the total number of miles that were work-related. I can use my equation from Part A to find the answer.
	$32.13 = 0.51x$
	$x = \frac{32.13}{0.51} = 63$
	$\frac{63}{134} \times 100 \approx 47\%$

2	Student response includes 2 of the 3 elements.
1	Student response includes 1 of the 3 elements.
0	Student response is incorrect or irrelevant.