सुdoku
mahabharat

Episode – 6
5th – 10th June 2020

Twisted Classics and Hybrids
By
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Sudoku Mahabharat rounds will also serve as qualifiers for Indian Sudoku Championship for year 2020. Please check http://logicmastersindia.com/SM/2020sm.asp **for details.**

About this Episode

This episode has the following Sudokus:
- Mini Classic Sudoku (4)
- Classic Sudoku (4)
- Overlapping Sudoku (2)
- Linked Sudoku (2)
- Odd Even – 2Odd2Even Sudoku (2)
- Killer – Little Killer Sudoku (2)
- Renban-Palindrome (50-50) Sudoku (2)

How to participate?

- Understand the rules of different Sudokus that will appear in this episode. This Instruction Booklet has rules and examples for each Sudoku.
- Download the password protected Sudoku booklet (will be uploaded before the test starts). The Sudoku booklet contains the actual Sudokus to be solved. It is password protected, so you won't be able to open it.
- Any time on or after 5th June (but on or before 10th June), login at the submission page using your LMI userid and password.
- Please check the submission page for exact timing.
- Click on "Start". At this time, password for pdf will be shown and timer will start.
- You can either solve online using flash interface or print the pdf and solve on paper.
- Each Sudoku will be marked with two arrows
- If solving on paper
    - Fill the answer form with digits along the marked arrow(s)
    - Click submit button
- If solving online
    - After solving the Sudoku, click on "Submit" button below the grid
    - Each Sudoku grid has different submit buttons

If you are participating at LMI for first time, you must check the F.A.Q. at: http://logicmastersindia.com/t/?tid=381.

Points Table and Scoring

Points typically indicate difficulty of the Sudokus and time required to solve them. While the organizers have made best efforts to match them, your personal experience and preference may differ.

This test uses instant grading where a solver confirmation that the solution is correct or sudoku's potential score. The first, second, third, and fourth incorrect submissions reduce the potential score to 90%, 70%, 40%, and 0% respectively.

Mini Classic 1-6	1, 1, 1, 1
Classic 1-9	7, 4, 4, 7
Overlapping 1-6, 1-9	3, 8
Linked 1-6,1-9	4, 9
Odd Even – 2Odd2Even 1-6,1-9	2, 9
Killer-Little Killer 1-6,1-9	3, 14
Renban-Palindrome (50-50) 1-6,1-9	4, 18

Bonus

If you submitted all Sudokus correctly, you can have bonus points 1 point per minute saved, computed up to seconds.

General Rules

To make the rules less repetitive, you will see following line "Apply mini classic or classic Sudoku rules" in most Sudoku rules. This means "Place a digit from 1 to N, where N is the size of the grid, in each empty cell so that each digit appears exactly once in each row, column and outlined region." These outlined regions could be 2x3 boxes, 3X3 boxes, or other shapes.

Each Sudoku will be marked with 2 lettered arrows. If you are solving on paper, you need to submit the digits in these arrows, in order, including the givens. For example, the answer key for the Sudoku at the right is 162897453, 517698432.

3	8	7	4	6	5	1	2	9
9	5	4	2	3	1	7	6	8
1	6	2	8	9	7	4	5	3
2	9	3	1	4	6	8	7	5
8	7	1	5	2	9	3	4	6
5	4	6	3	7	8	9	1	2
7	2	5	9	8	4	6	3	1
6	1	9	7	5	3	2	8	4
4	3	8	6	1	2	5	9	7

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About the Sudoku Booklet

The password protected Sudoku booklet will have 9 pages. If you are planning to solve on paper, we advise you to have a printer accessible with enough paper.

The Sudoku booklet will look similar to the next pages in this instruction booklet. The font sizes, cell sizes, colors, borders, shading, margin will be similar. We recommend you to print few pages of this instruction booklet. You can avoid any last minute surprise during the test.

1-4 Mini Classic Sudoku
1+1+1+1 points

Place a digit from 1 to 6 in each empty cell so that each digit appears exactly once in each row, column and 2X3 box.

5-8 Classic Sudoku
7+4+4+7 points

Classic Sudoku

Place a digit from 1 to 9 in each empty cell so that each digit appears exactly once in each row, column and 3X3 box.


Sudoku Mahabharat   **Twisted Classics and Hybrids (June 2020)**

Overlapping Sudoku - 1

3 points

Apply mini classic Sudoku rules to each of the grids.

Two grids are overlapping.
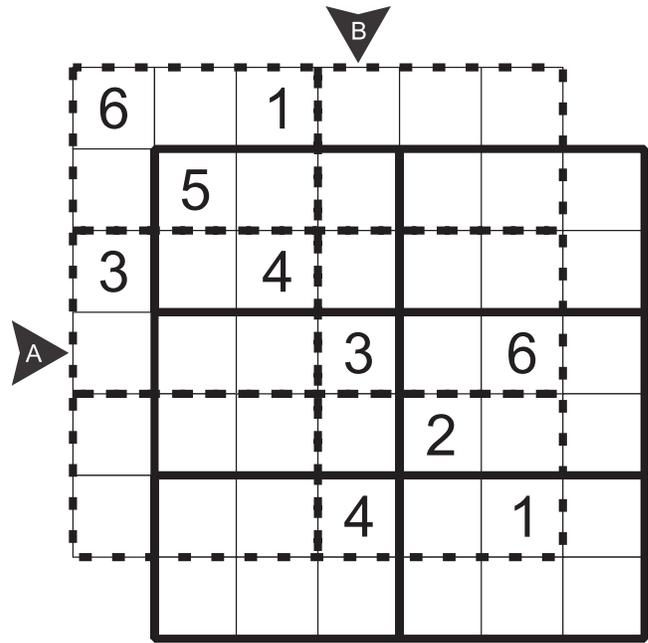
Overlapping Sudoku - 2

8 points

Apply classic Sudoku rules to each of the grids.

Two grids are overlapping.

Sudoku mahabharat

Twisted Classics and Hybrids (June 2020)
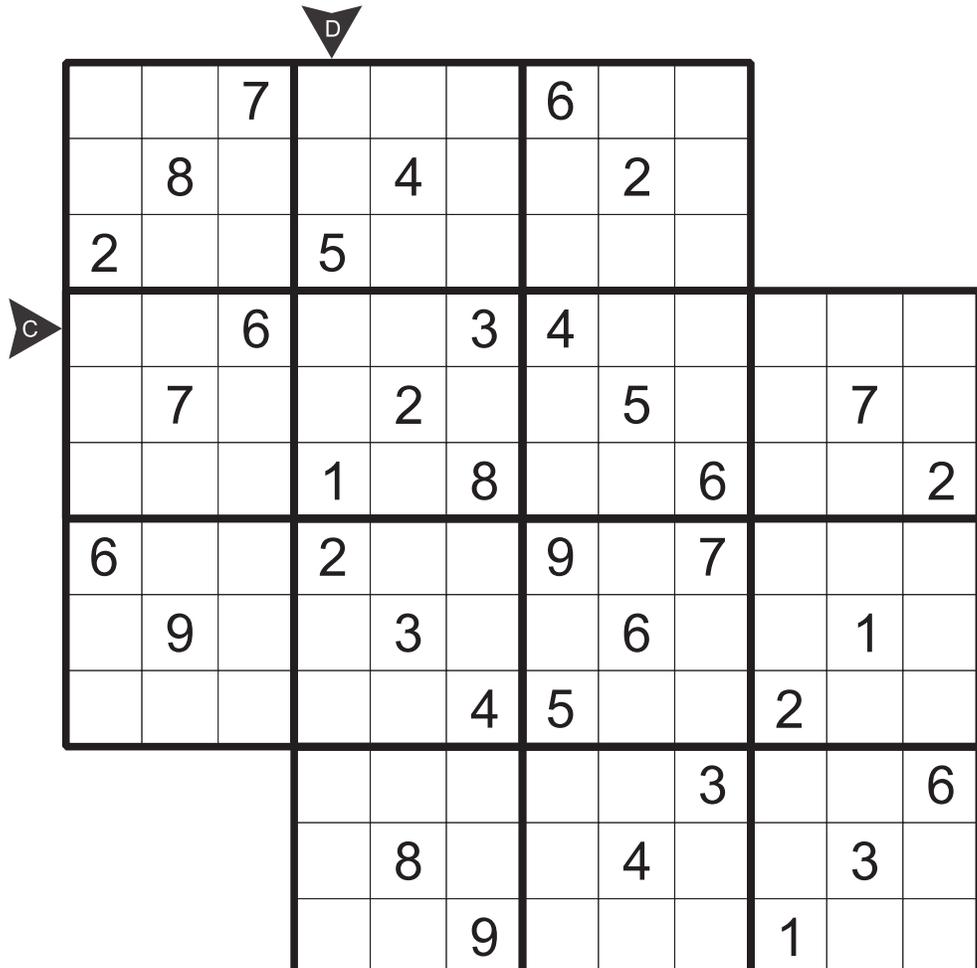
Linked Sudoku - 1

4 points

Apply mini classic Sudoku rules to each of the grids.

Two grids are linked to each other. The shaded cells must contain same digit in both the grids.

Linked Sudoku - 2

9 points

Apply classic Sudoku rules to each of the grids.

Two grids are linked to each other. The shaded cells must contain same digit in both the grids.

Odd Even – 2Odd2Even Sudoku - 1

2 points

Apply mini classic Sudoku rules.

Odd Even rules: Shaded squares should contain even digits (2,4,6) while shaded circles should contain odd digits (1,3,5). A cell which is not shaded can contain digit of any parity.

2Odd2Even rules: There can never be more than 2 consecutive digits of the same parity in a row or column.
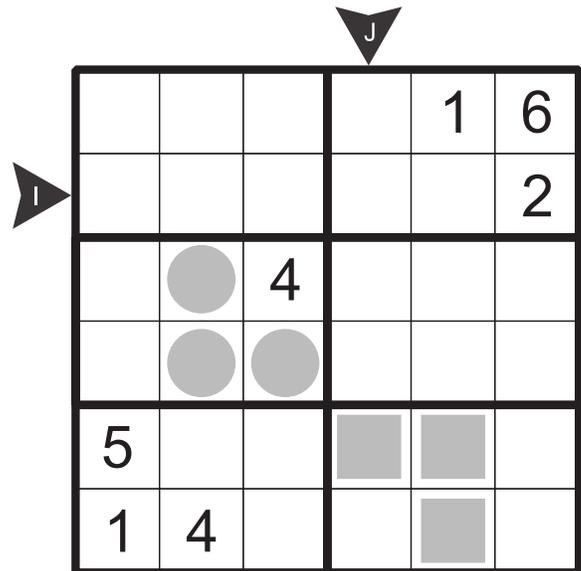
Odd Even - 2Odd2Even Sudoku - 2

9 points

Apply classic Sudoku rules.

Odd Even rules: Shaded squares should contain even digits (2,4,6,8) while shaded circles should contain odd digits (1,3,5,7,9). A cell which is not shaded can contain digit of any parity.

2Odd2Even rules: There can never be more than 2 consecutive digits of the same parity in a row or column.

Sudoku mahabharat   **Twisted Classics and Hybrids (June 2020)**
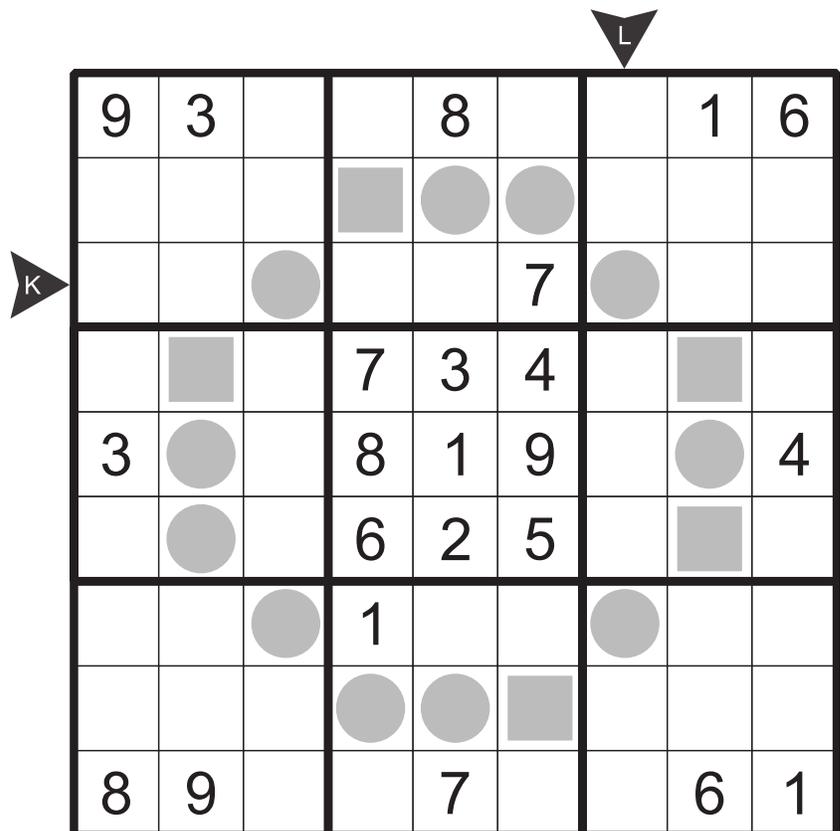
Killer – Little Killer Sudoku - 1

3 points

Apply mini classic Sudoku rules.

<u>Killer rules</u>: The sum of digits in cells inside every cage must equal the total given for the cage at the upper left cell. Digits do not repeat inside a cage.

<u>Little Killer rules</u>: The numbers with arrows outside the grid indicate the sum of the digits appearing in the cells in the corresponding direction. Digits can repeat in the direction of the arrow.
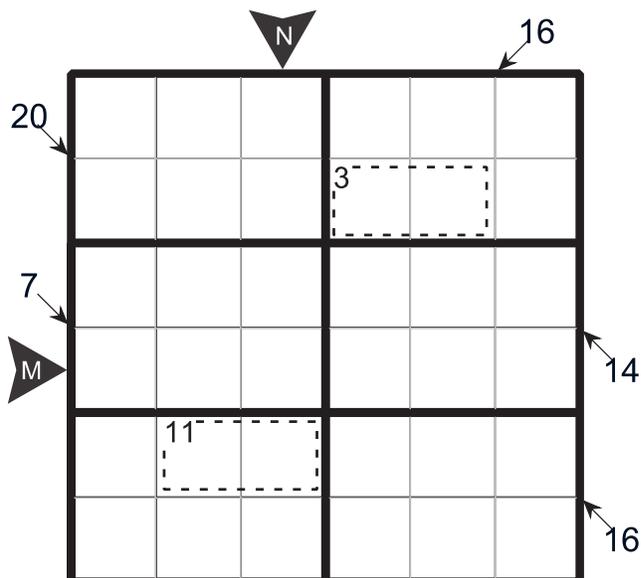
Killer – Little Killer Sudoku - 2

14 points

Apply classic Sudoku rules.

<u>Killer rules</u>: The sum of digits in cells inside every cage must equal the total given for the cage at the upper left cell. Digits do not repeat inside a cage.

<u>Little Killer rules</u>: The numbers with arrows outside the grid indicate the sum of the digits appearing in the cells in the corresponding direction. Digits can repeat in the direction of the arrow.
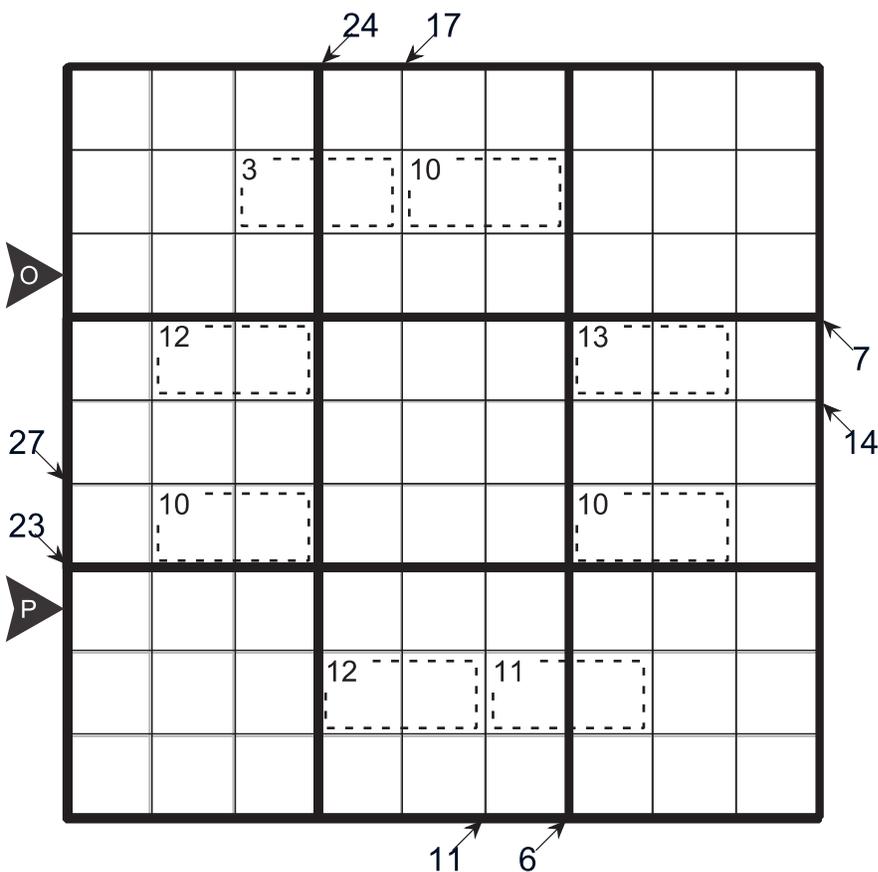
Renban – Palindrome (50-50) Sudoku - 1

4 points

Apply mini classic Sudoku rules.

50-50 rule: Exactly 50% of the grey lines follow Renban rules and the other 50% follow Palindrome rules.

Renban rules: The grey line contains a set of distinct consecutive digits.

Palindrome rules: The digits in the cells with the grey line form palindromes, i.e. they read the same from both the directions.
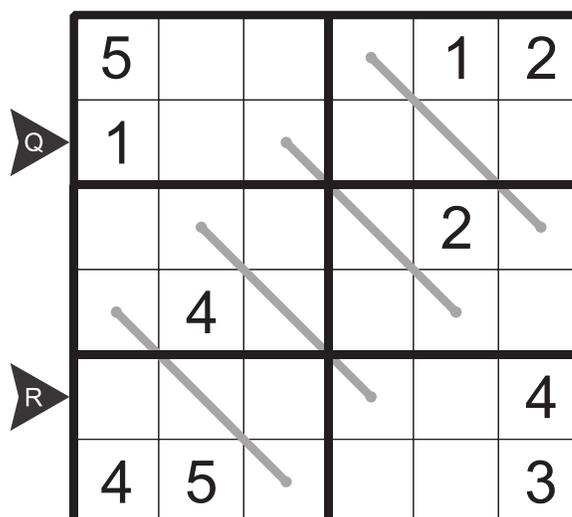
# Renban – Palindrome (50-50) Sudoku - 2

18 points

Apply classic Sudoku rules.

50-50 rule: Exactly 50% of the grey lines follow Renban rules and the other 50% follow Palindrome rules.

Renban rules: The grey line contains a set of distinct consecutive digits.

Palindrome rules: The digits in the cells with the grey line form palindromes, i.e. they read the same from both the directions.
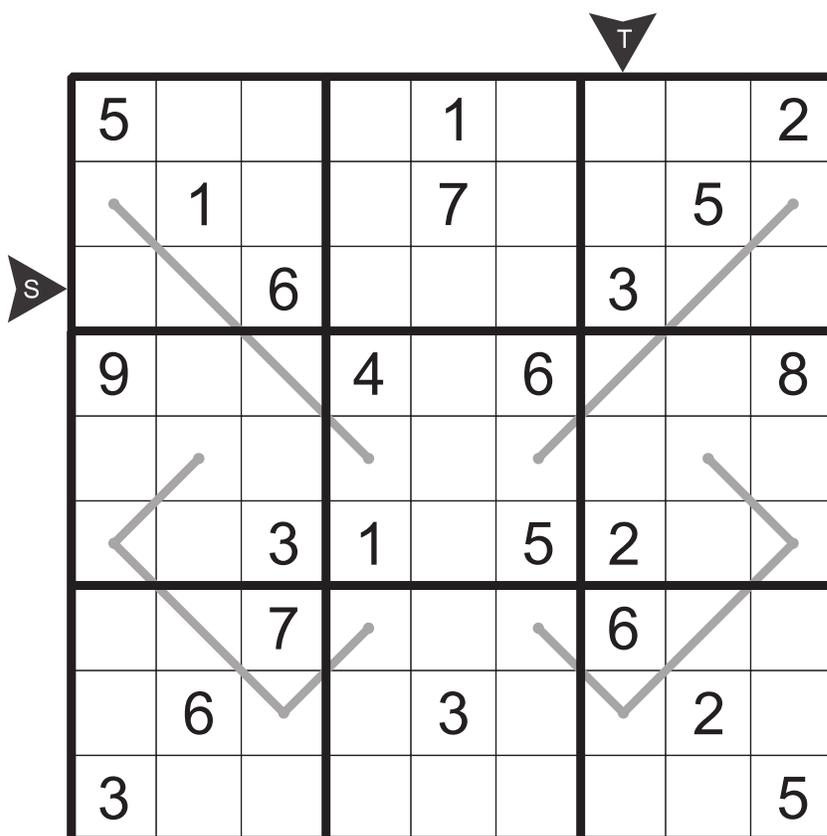
Mini Classic

			B		
1	2	4	6	3	5
5	6	3	4	2	1
4	1	2	3	5	6
3	5	6	1	4	2
2	3	1	5	6	4
6	4	5	2	1	3

(A marker at left of row 3)

Classic

4	1	2	6	7	3	9	8	5
8	3	7	9	1	5	4	6	2
6	9	5	4	8	2	1	3	7
2	5	9	8	3	1	7	4	6
7	8	1	5	6	4	3	2	9
3	4	6	2	9	7	5	1	8
9	7	3	1	2	6	8	5	4
1	2	4	7	5	8	6	9	3
5	6	8	3	4	9	2	7	1

(D marker top, C marker left)

Overlapping - 1

6	2	1	5	3	4	
4	5	3	1	6	2	4
3	6	4	2	1	5	3
5	1	2	3	4	6	5
1	4	5	6	2	3	1
2	3	6	4	5	1	2
	2	1	5	3	4	6

(B marker top, A marker left)

Overlapping – 2

4	1	7	3	8	2	6	9	5			
5	8	9	6	4	1	7	2	3			
2	6	3	5	7	9	1	4	8			
8	5	6	7	9	3	4	1	2	5	6	8
3	7	1	4	2	6	8	5	9	3	7	1
9	4	2	1	5	8	3	7	6	4	9	2
6	3	4	2	1	5	9	8	7	6	4	3
1	9	5	8	3	7	2	6	4	9	1	5
7	2	8	9	6	4	5	3	1	2	8	7
			5	4	1	7	9	3	8	2	6
			6	8	2	1	4	5	7	3	9
			3	7	9	6	2	8	1	5	4

(D marker top, C marker left)

Linked - 1

4	3	2	6	5	1
5	6	1	4	3	2
2	1	3	5	6	4
6	4	5	2	1	3
3	5	4	1	2	6
1	2	6	3	4	5

(E marker left, F marker bottom)

4	3	2	5	6	1
5	6	1	2	3	4
6	1	3	4	5	2
2	4	5	6	1	3
3	5	4	1	2	6
1	2	6	3	4	5

Linked - 2

1	7	6	2	3	8	9	5	4
5	2	8	9	4	7	1	3	6
9	4	3	1	6	5	8	2	7
3	5	2	4	9	1	6	7	8
6	1	7	8	5	2	4	9	3
8	9	4	3	7	6	5	1	2
2	3	5	6	8	9	7	4	1
4	6	9	7	1	3	2	8	5
7	8	1	5	2	4	3	6	9

(G marker left)

1	7	6	5	4	9	8	2	3
5	2	8	6	1	3	9	7	4
9	4	3	7	2	8	1	5	6
6	8	7	4	9	1	5	3	2
3	9	4	8	5	2	6	1	7
2	1	5	3	7	6	4	9	8
8	6	9	2	3	5	7	4	1
7	3	1	9	6	4	2	8	5
4	5	2	1	8	7	3	6	9

(H marker top)

Odd Even-2Odd2Even - 1

Killer – Little Killer - 1

Odd Even - 2Odd2Even – 2

Killer – Little Killer – 2

Renban – Palindrome (50-50) – 1

Renban – Palindrome (50-50) – 2