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# Logic Masters 2017 Round 2 – Loop

#### Time: 55 minutes

2.1 Turning Loop
2.2 Milky Way
2.3 Simple Loop
2.4 Transposed Multi Loop
2.5 Touching Loop
2.6 Crossing Loop
2.7 Multi Loop
2.8 Transposed Turning Loop
2.9 Touching Fences
2.10 Fences
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Bonus for every minute remaining ...... 4 points

PUNKTE	
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# 2.1 Turning Loop

Draw a loop into the grid connecting the centers of horizontally or vertically adjacent cells using every white cell without number exactly once. Numbers indicate in how many of the eight adjacent cells the loop turns.

	2	4	
	1	3	

#### 2.2 Milky Way

Draw a directed loop into the grid connecting the centers of horizontally or vertically adjacent cells using every white cell without number and every cell with a star exactly once. Numbers indicate how often the loop passes through the eight adjacent cells. In cells containing stars the loop turns and goes straight through the next cell along the loop.

		3			
		$\star$		1	
2	$\star$		2		
2	*		2		
2	*		2		

# 2.3 Simple Loop

Draw a loop into the grid connecting the centers of horizontally or vertically adjacent cells using every white cell exactly once.



### 2.4 Transposed Multi Loop

Draw one or more loops into the grid connecting the center of horizontally or vertically adjacent cells using every cell exactly once. Numbers appear on the intersections of the grid lines and determine how many different loops pass through the four adjacent cells.



# 2.5 Touching Loop

30 Punkte



#### 2.6 Crossing Loop

Draw a loop into the grid connecting the centers of horizontally or vertically adjacent cells using every empty cell exactly once, and crosses itself at the given intersections. Numbers appear at the intersections of the grid lines and determine how often the loop winds around this point.



# 2.7 Multi Loop

Draw one or more loops into the grid connecting the center of horizontally or vertically adjacent cells using every white cell without number exactly once. Numbers determine how many different loops pass through the eight adjacent cells.

		3				
	1					
				2		
2						
					4	
		1				
3						
					2	

### 2.8 Transposed Turning Loop

35 Punkte

Draw a loop into the grid connecting the center of horizontally or vertically adjacent cells using every cell exactly once. Numbers appear on the intersections of the grid lines and indicate in how many of the adjacent four cells the loop turns.



# 2.9 Touching Fences

40 Punkte

• •		1			2	
	2		2			
		3		1		
	1		3			2
		2				
			1			
2		2			3	
	1					
2			2		2	
		3		1		
3		1			3	
			1			

#### 2.10 Fences

Draw a loop along the dotted lines using every point of the grid at most once. Numbers indicate how many edges of the cell are used by the loop.

•	• •	• • •	• • •	• •	• •	• • • • • •	
	1		3			2	
		2				1	1
3		1	2				2
	2			2	3		
		1			2		
2	1	2	3	1		2	
		-	-		3		2
		1	2			1	