

Exercise 1 Fill in the following table by specifying the set of the interior points, boundary points, the closure, the exterior, the isolated points and the closure.

Nr.	A	int A	bd A	cl A	ext A	Izo A	A'
1	$(-\infty, -1] \cup (2, +\infty)$						
2	$(-1, 9] \cup [10, 20)$						
3	$\left((-1, 9] \cup [10, 20)\right) \cap \mathbb{N}$						
4	$\{1, 2, 3\}$						
5	\mathbb{N}						
6	$\mathbb{R} \setminus \{1, 2, 3\}$						
7	$\mathbb{R} \setminus \mathbb{N}$						
8	\mathbb{Z}						
9	$\mathbb{R} \setminus \mathbb{Z}$						
10	\mathbb{Q}						
11	$\mathbb{R} \setminus \mathbb{Q}$						
12	\mathbb{R}						

Prove your statements for sets with the numbers (in the first column of the table) **1,3,5,6,9,11**.