

REAL NUMBER SYSTEM
Classification of Numbers

1. For every given number, clearly state all the sets the number belongs to. If the given number is not real, write: "Not \mathbb{R} ", using the notation introduced in class.

	Number	All sets a given number belongs to
1	$\sqrt{8}$	
2	π	
3	0	
4	-4.5	
5	$\frac{5}{1.2}$	
6	5.1	
7	$\sqrt{-12}$	
8	$1.\overline{47}$	
9	-0.9	
10	$\frac{\sqrt{6}}{5}$	
11	1.85	
12	10^9	
13	10^{-5}	
14	x	

	Number	All sets a given number belongs to
15	149	
16	-0.03	
17	$\sqrt{16}$	
18	-2	
19	$\frac{20}{5}$	
20	$-\sqrt{121}$	

2. Give two examples of a number that is real but not rational: _____ and _____ .

3. Describe integers in words without giving examples.

4. Define a rational number.