Exercise 2015-9ℰA-00001(1)

NO CALCULATOR MAY BE USED!

(1) Complete the following table by making a ✓ in the appropriate column(s) to which each number belongs:

		$\mathbb{N}$	$\mathbb{N}_0$	$\mathbb{Z}$	$\mathbb{Q}$	$\mathbb{Q}'$	$\mathbb{R}$
(a)	$-5{,}52\ldots$						
(b)	$\sqrt[3]{-8}$						
(c)	$\frac{3}{7}$						
(d)	113						
(e)	$\sqrt{\frac{12}{4}}$						
(f)	π						
(g)	-292						
(h)	$\frac{0}{5}$						
(i)	$\sqrt[4]{64}$						
(j)	$\left(\sqrt{7}\right)^2$						

(2) Express each of the following as a common fraction in its simplest form:

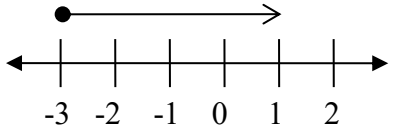
(a) $2{,}3\dot{2}$ (b) $0{,}\dot{5}\dot{1}$

(c) $2{,}45$ (d) $\sqrt{0{,}64}$

(3) Determine between which two integers the following irrational number will lie:

(a) $-\sqrt{27}$ (b) $\sqrt[3]{84}$

(4) Complete the following table:

	Set builder notation:	Interval notation:	Graphic representation:
(a)	$\{x \,/\, -2 < x \leq 1\,; x \in \mathbb{R}\}$		
(b)		$y \in (-\infty\,; 0)$	
(c)	$\{m \,/\, m \leq 7\,; m \in \mathbb{N}\}$		
(d)			
(e)			