

I'm curious to know if I can write  
 $[-1/3, 1] = \mathbb{E} \cup (-1/3, 1/3) \cup \mathbb{E} \cup (1/3, 1) \cup \mathbb{E}$   
A

Can I express  $(1/3, 1)$  as a union of an  
infinite number of singleton sets?  $(-1/3, 1/3)$   
 $\mathbb{E} \cup \mathbb{E}$  and  $\mathbb{E} \cup \mathbb{E}$  are open in  $\mathbb{E} \cup \mathbb{E}$  from ii) a)  
and iii))

b)  $x \in B_\epsilon(0)$  if  
 $2|x| + 2|0| + |x-0| < \epsilon$

$$3|x| < \epsilon$$

$$-\epsilon/3 < x < \epsilon/3$$

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