

201117 - FA I - 2:

→ Questions? Let hear!

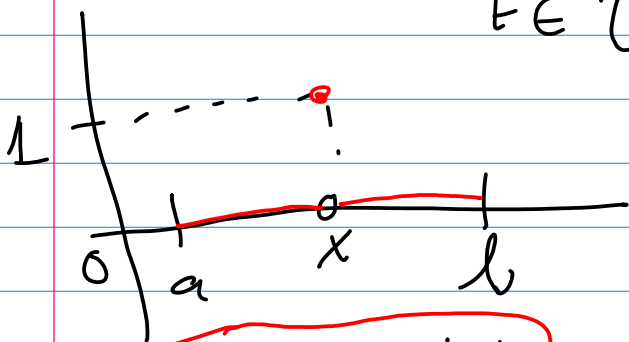
→ most of the time I start around "15:15" hour

No problems??

(1.3) (12) $B[a, b]$ ($a < b$)

- bounded functions functions

$$d(x, y) = \sup_{t \in [a, b]} |x(t) - y(t)|$$



$$f_x(t) = \begin{cases} 1 & \text{if } t = x \\ 0 & \text{if } t \neq x \end{cases}$$

$B(f_x, \frac{1}{2})$ disjoint

$B(f_{x_1}, \frac{1}{2}), B(f_{x_2}, \frac{1}{2})$ $x_1 \neq x_2$

$$d(f_{x_1}, f_{x_2}) = 1 \quad (x_1 \neq x_2)$$

$(\bigcup_{x \in [a, b]} B(f_x, \frac{1}{2}))$ || all balls are disjoint.

uncountable

|| no countable subset (D.N.P.)

which covers that set.

~~search on internet:~~
bounded functions not separable