13$^\text{th}$ Exercise Sheet, Set Theory of the Real Line, WS 2014/2015

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Exercise 24

Let $\mathbb{P} \in \{\mathbb{S}, \mathbb{V}, \mathbb{M}, \mathbb{L}, \mathbb{B}\}$. Show that $I_\mathbb{P} = J_\mathbb{P}$.

Exercise 25

Show that:

$$X \text{ is } \mathbb{B}\text{-measurable} \Leftrightarrow X \text{ is Lebesgue measurable}$$
$$X \text{ is } \mathbb{C}\text{-measurable} \Leftrightarrow X \text{ has the Baire property.}$$