

Tutorial 1

Q1 : Show that $\mathbb{Q} \cap [0,1] \times [0,1]$ is not Jordan measurable in \mathbb{R} .

Q2 : Show that $\left\{\frac{1}{n}\right\}_{n=1}^{\infty} \times [0,1]$ is Jordan measurable.

Q3 : Show that any straight line segment has Jordan measure zero. Note that a straight line may not be horizontal or vertical.

Q4 : Show that Any simple region E in \mathbb{R}^2 is Jordan measurable, and $\mu(E) = A(E)$.