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## outer regular

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Let  $X$  be a locally compact Hausdorff topological space with Borel  $\sigma$ -algebra  $\mathcal{B}$ , and suppose  $\mu$  is a measure on  $(X, \mathcal{B})$ . For any Borel set  $B \in \mathcal{B}$ , the measure  $\mu$  is said to be *outer regular* on  $B$  if

$$\mu(B) = \inf \{ \mu(U) \mid U \supset B, U \text{ open} \}.$$

We say  $\mu$  is *inner regular* on  $B$  if

$$\mu(B) = \sup \{ \mu(K) \mid K \subset B, K \text{ compact} \}.$$