

# Problem with almost everywhere equality

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A topological space  $Y$  is said to have (AEEP) if the following condition is fulfilled. Whenever  $(X, \mathfrak{M})$  is a measurable space and  $f, g: X \rightarrow Y$  are two measurable functions, then the set  $\Delta(f, g) = \{x \in X: f(x) = g(x)\}$  is a member of  $\mathfrak{M}$ . It is shown that a metrizable space  $Y$  has (AEEP) iff the cardinality of  $Y$  is no greater than  $2^{\aleph_0}$ .

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