

9. Consider the probability space $(\mathcal{S}, \mathcal{B}, P)$, and suppose A and B are two sets in \mathcal{B} such that A and B are exhaustive for \mathcal{S} . Moreover, assume $P(A) = 0.8$ and $P(B) = 0.5$. Find $P(AB)$. Explain your steps.