



Probability Assignment -I

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I. PROBLEM

Given that E and F are events such that $P(E)=0.6$, $P(F)=0.3$ and $P(E \cap F)=0.2$, find $P(E|F)$ and $P(F|E)$.

II. SOLUTION

$$P(E|F) = \frac{P(E \cap F)}{P(F)} = \frac{0.2}{0.3} = \frac{2}{3}$$

$$P(F|E) = \frac{P(E \cap F)}{P(E)} = \frac{0.2}{0.6} = \frac{1}{3}$$