



Probability Assignment -I

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I. PROBLEM

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

II. SOLUTION

$$\Pr(E|F) = \frac{\Pr(EF)}{\Pr(F)} = \frac{0.2}{0.3} = \frac{2}{3} \quad (1)$$

$$\Pr(F|E) = \frac{\Pr(EF)}{\Pr(E)} = \frac{0.2}{0.6} = \frac{1}{3} \quad (2)$$