



# 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  $P(EF) = 0.2$ , find  $P(E | F)$  and  $P(F | E)$ .

## II. SOLUTION

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

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