Related Problem with Solution:

1. 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)

O Given,
$$P(E) = 0.6$$
, $P(F) = 0.3$ and $P(E \cap F) = 0.2$
(i) $P(E \mid F) = \frac{P(E \cap F)}{P(F)} = \frac{0.2}{0.3} = \frac{2}{3}$.
(ii) $P(F \mid E) = \frac{P(F \cap E)}{P(E)} = \frac{P(E \cap F)}{P(E)} = \frac{0.1}{0.6} = \frac{1}{3}$