Assignment1

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Q 1.17 Determine P(E/F), if two coins are tossed once, where
(i) E : tail appears on one coin, F : one coin shows head
(ii) E : no tail appears, F : no head appears

solution

$$P(E/F) = \frac{P(EF)}{P(F)}$$

$$\text{sample space } = \{HH, TH, HT, TT\}$$

(i)
$$P(F) = \frac{3}{4}$$

$$P(EF) = \frac{1}{2}$$

$$P(E/F) = \frac{2}{3}$$

(ii)
$$P(F) = \frac{1}{4}$$

$$P(EF) = 0$$

$$P(E/F) = 0$$