

Assignment Probability

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IITH Future Wireless Communication (FWC)

probability

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1 Problem

1. Q:12,13.2,1

13.2.1 If $\Pr\{A\}=\frac{3}{5}$ and $\Pr\{B\}=\frac{1}{5}$ find $\Pr(\mathbf{A}\cap\mathbf{B})$ if **A and B are independent events?**
solution:

$$P(A) = \frac{3}{5}, \quad (13.2.1.1)$$

$$P(B) = \frac{1}{5} \quad (13.2.1.2)$$

$$P(AB) = P(A) * P(B) \quad (13.2.1.3)$$

$$P(AB) = \frac{3}{5} * \frac{1}{5} \quad (13.2.1.4)$$

$$P(AB) = \frac{3}{25} \quad (13.2.1.5)$$