

5C Mutually Exclusive & Independent Events

Mutually Exclusive

Independent

1. Events A and B are Mutually Exclusive and $P(A) = 0.2$ and $P(B) = 0.4$

Calculate:

a) $P(A \cup B)$

b) $P(A \cap B')$

c) $P(A' \cap B')$

2. Events C and D are Independent and $P(C) = \frac{1}{3}$ and $P(D) = \frac{1}{5}$

Calculate:

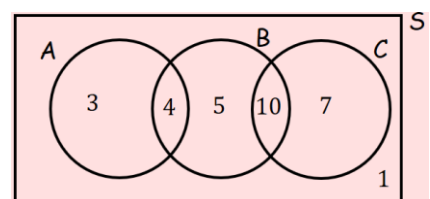
a) $P(A \cap B)$

b) $P(A \cap B')$

c) $P(A' \cap B')$

3. The Venn Diagram shows the number of students in a particular class that watch any of three popular TV programmes, A, B and C.

a) Find the probability that a student watches B or C or both.



b) Determine whether watching A and watching B are statistically independent.