



EVENTOS: $A = [x \leq b, y \leq d] \therefore P_n[A] = F(b, d)$

$B_1 = [x \leq a, y \leq d] \therefore P_n[B_1] = F(a, d)$

$B_2 = [x \leq b, y \leq c] \therefore P_n[B_2] = F(b, c)$

$R \cup (B_1 \cup B_2) = A$; $R \in B_1 \cup B_2$ MUTUAMENTE EXCLUYENTES

$$P_n[A] = P_n[R] + P_n[B_1 \cup B_2]$$

$$= P_n[R] + P_n[B_1] + P_n[B_2] - P_n[B_1 \cap B_2]$$

mas, $P_n[B_1 \cap B_2] = P_n[x \leq a, y \leq c] = F(a, c)$

$$\therefore P_n[R] = P_n[A] - P_n[B_1] - P_n[B_2] + P_n[B_1 \cap B_2]$$

$$= F(b, d) - F(a, d) - F(b, c) + F(a, c)$$

$$P_n[a < x \leq b, c < y \leq d] = F(b, d) - F(a, d) - F(b, c) + F(a, c)$$