
1:

1. (a)

$$A = \{0, 6, 8\} \quad B' = \{8, 9\}$$

$$c' = \{1, 8\} \quad A' = \{1, 3, 9\}$$

Now we have : $(A \cap B') \cup (C' \cap A') = \{1, 8\}$

2. (b) First lets find all subsets of A: $\{\}, \{0\}, \{6\}, \{8\}, \{0, 6\}, \{0, 8\}, \{6, 8\}, \{0, 6, 8\}$.

subsets of C: $\{\}, \{0\}, \{3\}, \{6\}, \{9\}, \dots, \{0, 3, 6, 9\}$

A set made of subsets which are part of A and not part of C: $\{\{8\}, \{0, 8\}, \{6, 8\}, \{0, 6, 8\}\}$

2: $P(\text{at least 4 left handed}) = P(4 \text{ left handed}) + P(5 \text{ left handed})$:

$$= \frac{\binom{5}{4} \binom{10}{5}}{\binom{15}{9}} + \frac{\binom{5}{5} \binom{10}{4}}{\binom{15}{9}} = 0.252 + 0.042 = 0.294$$