

A survey was made studying households of a city of 100,000 about their preference drink (coffee or tea)

1. 40,000 like coffee
2. 20,000 like tea
3. 10,000 like both coffee and tea

We are considering those events:

Event A : "drink Coffee" .

Event B : "drink tea.

Calculate:

1. $P(A)$
2. $P(B)$
3. $P(A \cap B)$
4. $P(\bar{A})$
5. $P(\bar{B})$
6. $P(A \cup B)$

Fill the following table,

Events	B	\bar{B}	Total
A
\bar{A}
Total

Calculate:

1. The probability that a person interviewed drinks coffee given that the same person drinks tea?
2. The probability that a person interviewed drinks tea given that the same person drinks coffee?