

Question 1: The following table shows the relationship between the price of a loaf of bread and the corresponding quantity demanded. Derive correlation coefficient and comment on the found value.

X (Price)	Y (Quantity Demanded)
1	100
2	80
3	50
4	20

Question 2: Consider a standard deck of cards, 13 cards (1~ 10, J, Q, K) for 4 suits (clover, spade, heart and diamond). Set Event A as Red suit and Event B and odd numbers (consider as J=11, Q=12, K=13).

(a) Complete the probability table, including joint and marginal probabilities

(b) Show if A and B are mutually exclusive.

(c) Show if A and B are collectively exhaustive.

