



Probability Ex 13.1 Q46

Answer :

GIVEN: 12 defective pens are accidentally mixed with 132 good ones. One pen is taken out at random from this lot.

TO FIND: Probability that the pen taken out is good.

Total number of bulbs is $132 + 12 = 144$

Total numbers of bulbs which are good are 132

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability that pen taken out is good is $\frac{132}{144} = \frac{11}{12}$

Probability Ex 13.1 Q47

Answer :

GIVEN: Five cards-the ten, jack, queen, king and ace of diamond are well shuffled with their face downwards of cards. One card is drawn at random.

TO FIND: Probability that

(i) The card is the queen.

(ii) If the queen is drawn and left aside, what is the probability that the second card picked up is (a) an ace (b) a queen

Total number of cards is 5

(i) Total number of queens is 1

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability that the card taken out is queen is equal to $= \frac{1}{5}$

(ii) When queen is drawn and left aside.

Hence Total number of cards left is 4

(a) Total number of ace card is 1

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability that the card taken out is an ace is equal to $= \frac{1}{4}$

(b) Total numbers of queen is 0

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probabilities that card taken out is queen $= 0$

Probability Ex 13.1 Q48

Answer :

GIVEN: Harpreet tosses two different coins simultaneously (Re1 and Rs2)

TO FIND: Probability of getting at least one head.

When two coins are tossed then the outcome will be

TT, HT, TH, HH.

Hence total number of outcome is 4.

At least one head means 1H or 2H

Hence total number of favorable outcome i.e. at least one head is 3

We know that PROBABILITY = $\frac{\text{Number of favourable event}}{\text{Total number of event}}$

Hence probability of getting at least one head $= \frac{3}{4}$

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