

Probability Distribution - Matching Worksheet

Match the word problems to their answers. Write the letter of the answer that matches the problem.

1. Roger shuffles the playing cards and queens come out 4 times over a series of draws. X is the random variable "the sum of the cards that turn up". Find the probability distribution of X .

a. $P(0) = 204/575$
 $P(1) = 1071/2300$
 $P(2) = 189/1150$
 $P(3) = 7/460$

2. Betsy shuffles the playing cards and hearts come out 4 times over a series of draws. X is the random variable "the sum of the cards that turn up". Find the probability distribution of X .

b.

X	1	2	3	4
$P(X-x)$	$\frac{1}{13}$	$\frac{1}{13}$	$\frac{1}{13}$	$\frac{1}{13}$

3. In a bag of 25 bed sheet. 3 are defective. 7 bed sheets are randomly selected. Let X be the number of defective bed sheet among the selected bed sheets. Find the probability distribution of X .

c. $P(0) = 13/70$
 $P(1) = 351/770$
 $P(2) = 117/385$
 $P(3) = 3/55$

4. In a box of 22 pens. 3 are not working. 9 pens are randomly selected. Let X be the number of broken pens among the selected pens. Find the probability distribution of X .

d.

X	1	2	3	4
$P(X-x)$	$\frac{13}{52}$	$\frac{13}{52}$	$\frac{13}{52}$	$\frac{13}{52}$

