

Question 1:

For the pine tree seedlings, what is the probability that exactly 0, 1, 2, 3, 4, 5 and 6 seeds will germinate?

Question 2:

The probability that a top batsman will get a 50 in any given innings is 0.4. What is the probability that exactly two of the first 5 batsmen in our team will get a 50 today?

Question 3:

A manufacturer of electronic switches finds that in the long run 0.1 of these switches is defective at the end of the manufacturing process.

If 10 switches are selected randomly, find the probability that there are exactly 3 defective switches in the batch of 10.

Draw the probability distribution of the number of defective switches in a random sample of 10.

Question 4:

A dice is thrown 9 times. What is the probability of exactly 5 sixes turning up (not necessarily in a row)?

Question 5:

Assume that boy and girl babies are equally likely. What proportion of families with exactly 8 children will be expected to have 4 girls?

Question 6:

A coin is tossed 7 times. What is the probability that the result will be 7 heads?

Question 7:

Extension. Return to Question 3. Invent a way of calculating the mean (average) number of defective switches for any randomly selected batch of 10.