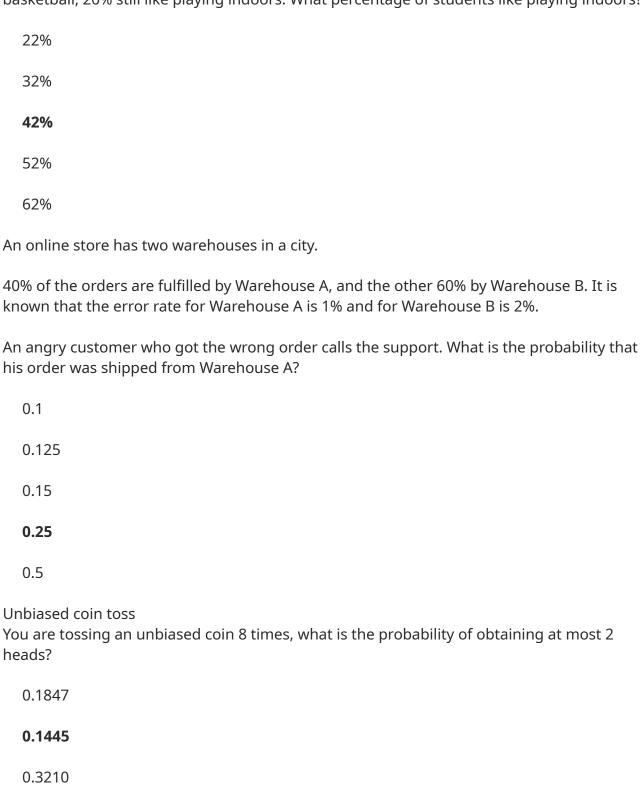
## DSML Module Test Reattempt: Data Analytics and Visualisation - Probability and Stats - Test 1

Percentage of basketball players

0.2752

A school has 600 students. Among them, 40% like playing basketball, and among those who like playing basketball, 75% like playing indoors. Among those who don't like playing basketball, 20% still like playing indoors. What percentage of students like playing indoors?



Rohit's score The marks obtained on a science midterm exam at Holy Cross School are roughly symmetric with a mean μ and standard deviation Rohit scored 80 marks in his exam. Find the z-score for Rohit's exam marks. 2.55 2.22 3.33 5.22 Defective screws A machine that manufactures screws is known to produce 10% screws as defective pieces. In a random sample of 20 screws, what is the probability that there are exactly 5 defective screws? 0.2321 0.3418 0.0319 0.0558 100 Tosses In a coin toss experiment, we flip a biased coin 100 times. The probability of getting a head on each flip is 0.3. What is the probability of getting exactly 25 heads? 0.0588 0.0505

## 0.0495 0.0199 otal Prob Red ball Suppose there are three boxes: Box A, Box B, and Box C. The probability of selecting Box A is 0.4, Box B is 0.3, and Box C is 0.3. Each box contains a different number of balls: Box A contains 5 red balls and 3 blue balls. Box B contains 4 red balls and 6 blue balls. Box C contains 6 red balls and 4 blue balls. If a box is randomly chosen, and then a ball is randomly drawn from the chosen box, what is the probability of selecting a red ball? 0.4 0.5 0.55 0.6 Weight Z score The average weight of students in a class is 60 kg with a standard deviation of 5 kg. If a student weighs 65 kg, what is their z-score? -0.2 1 0.2 -1

is it a spam mail

It is observed that 50% of mails received are spam. There is a software that filters spam mail before it reaches the inbox.

Its chances of tagging a spam mail as spam is 99% whereas it's chances of tagging a non-spam mail as spam mail is 5%.

If a certain mail is tagged as spam, find the probability that it is not a spam mail.

10.2%

4.8%

12.0%

9.8%

## **Counting Possible Outfits**

In a drawer, there are 3 different shirts, 4 different pants, and 2 different pairs of socks. If one article of clothing is randomly selected from each category without looking, How many total possible outfits can be formed?

9

12

24

29