A method of assigning probabilities based upon judgment is referred to as the

|  |  |
| --- | --- |
| a. | relative method |
| b. | probability method |
| c. | classical method |
| d. | subjective method |

If A and B are independent events with P(A) = 0.65 and P(A B) = 0.26, then, P(B) =

|  |  |
| --- | --- |
| a. | 0.400 |
| b. | 0.169 |
| c. | 0.390 |
| d. | 0.650 |

Exhibit 3-2

A survey of a sample of business students resulted in the following information regarding the genders of the individuals and their selected major.

**Selected Major**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gender** | **Management** | **Marketing** | **Others** | **Total** |
| Male | 40 | 10 | 30 | 80 |
| Female | 30 | 20 | 70 | 120 |
| **Total** | 70 | 30 | 100 | 200 |

In the exhibit 3-2 , What is the probability of selecting an individual who is majoring in Marketing?

|  |  |
| --- | --- |
| a. | 0.15 |
| b. | 0.20 |
| c. | 0.25 |
| d. | 0.40 |

In the exhibit 3-2 , What is the probability of selecting an individual who is majoring in Management, given that the person is female?

|  |  |
| --- | --- |
| a. | 0.15 |
| b. | 0.25 |
| c. | 0.35 |
| d. | 0.40 |

A probability distribution showing the probability of x successes in n trials, where the probability of success does not change from trial to trial, is termed a

|  |  |
| --- | --- |
| a. | uniform probability distribution |
| b. | binomial probability distribution |
| c. | hypergeometric probability distribution |
| d. | normal probability distribution |

An experiment consists of making 80 telephone calls in order to sell a particular insurance policy. The random variable in this experiment is a

|  |  |
| --- | --- |
| a. | discrete random variable |
| b. | continuous random variable |
| c. | complex random variable |
| d. | simplex random variable |

If you are conducting an experiment where the probability of a success is .02 and you are interested in the probability of 4 successes in 15 trials, the correct probability function to use is the

|  |  |
| --- | --- |
| a. | standard normal probability density function |
| b. | normal probability density function |
| c. | Poisson probability function |
| d. | binomial probability function |

**Exhibit 5-1**

The following represents the probability distribution for the daily demand of computers at a local store.

|  |  |
| --- | --- |
| **Demand** | **Probability** |
| 0 | 0.1 |
| 1 | 0.2 |
| 2 | 0.3 |
| 3 | 0.2 |
| 4 | 0.2 |

Refer to Exhibit 5-1. The expected daily demand is

|  |  |
| --- | --- |
| a. | 1.0 |
| b. | 2.2 |
| c. | 2, since it has the highest probability |
| d. | of course 4, since it is the largest demand level |

Stratified random sampling is a method of selecting a sample in which

|  |  |
| --- | --- |
| a. | the sample is first divided into strata, and then random samples are taken from each stratum |
| b. | various strata are selected from the sample |
| c. | the population is first divided into strata, and then random samples are drawn from each stratum |
| **d.** | None of these alternatives is correct. |

In point estimation

|  |  |
| --- | --- |
| a. | data from the population is used to estimate the population parameter |
| b. | data from the sample is used to estimate the population parameter |
| c. | data from the sample is used to estimate the sample statistic |
| d. | the mean of the population equals the mean of the sample |

As the number of degrees of freedom for a t distribution increases, the difference between the t distribution and the standard normal distribution

a. becomes larger

b. becomes smaller

c. stays the same

d. None of these alternatives is correct.

. If we change a 95% confidence interval estimate to a 99% confidence interval estimate, we can expect

a. the size of the confidence interval to increase

b. the size of the confidence interval to decrease

c. the size of the confidence interval to remain the same

d. the sample size to increase

The center of a normal curve is

|  |  |
| --- | --- |
| a. | always equal to zero |
| b. | is the mean of the distribution |
| c. | cannot be negative |
| d. | is the standard deviation |

Which of the following package is useful for aggregating and summarizing data over multiple subgroups, with more advanced applications?

1. sqldf
2. plyr
3. forecast
4. sql

What will be the output of the following code?

> f <- function()

{

+ ## This is an empty function

+ }

> class(f)

1. “function”
2. “class”
3. “procedure”
4. “class”
5. Which of the following code will print “Hello, world!”?

f <- function() {

+ cat("Hello, world!\n")

+ }

f()

f <- function() {

+ cat("Hello, World!\n")

+ }

f()

f <- function() {

+ cat("Hello world!\n")

+ }

f()

1. All of the mentioned
2. What would be the output of the following code?

x <- factor(c("yes", "yes", "no", "yes", "no"))

table(x)

1. no yes

2 3

1. yes no

2 3

1. no yes

2 2

1. yesno

3 3

1. Which of the following syntax is used to install forecast package?
   1. install.pack(“forecast”)
   2. install.packages(“cast”)
   3. install.packages(“forecast”)
   4. All of the mentioned
2. Which of the following convert a matrix of phi coefficients to polychoric correlations?
   1. poly()
   2. qline()
   3. phi2poly
   4. phi()