Thank you. Your test submitted.

You have cleared this assessment.

| Obtained Percentage | Obtained Marks |
| --- | --- |
| 100 % | 12 / 12 |

Best Attempt Score:100 % on 12-03-2025

A drawer contains 4 black socks, 6 brown socks and 8 gray socks. A man is getting dressed one morning and barely awake he randomly selects 2 socks from the drawer (without replacement). What is the probability that both of these socks are grey given that they are of the same color?

- ○ 0.444
- ◉ 0.57
- ○ 0.412
- ○ 0.098

Warning

This operation is disabled.

Three companies X, Y and Z supply 25%, 35% and 40% of the notebooks to a school. Past experience shows that 5%, 4% and 2% of the notebooks produced by these companies are defective. If a notebook was found to be defective, what is the probability that the notebook was supplied by A?

- 44/69
- 25/69
- 13/24
- 11/24

Warning

This operation is disabled.

If events A and B are mutually exclusive:

- ○ The occur simulatenously
- ◉ The cannot occur simulatenously
- ○ They don't influence each other
- ○ Event B is conditional over event A occuring.

In an African city, 4% of men are over 6 feet tall and 1% of women are over 6 feet tall. The total population of the city is divided in the ratio 3:2 in favour of women. If a person is selected at random from among all those over six feet tall, what is the probability that the person is a woman?

- ○ 2/5
- ◉ 3/11
- ○ 6/11
- ○ 3/5

Warning

This operation is disabled.

A couple has 2 children. Given that one of them is a boy, what is the probability that both children are boys? Assume, that the probability of a child being a boy or a girl is 1/2.

- ○ 1/4
- ○ 3/4
- ○ 1/2
- ◉ 1/3

Warning

This operation is disabled.

A night lamp manufactured by a company was found to be defective. There are three factories (X, Y, Z) where such lamps are produced. The Quality Control Manager (QCM) gives the following information about the company's night lamp production and the possible source of defects:

| Factory | Percentage of total production | Percentage of defective lamps |
|---|---|---|
| X | | 1.5% |
| Y | | 1% |
| Z | | 2% |

What is the probability that the defective lamp was

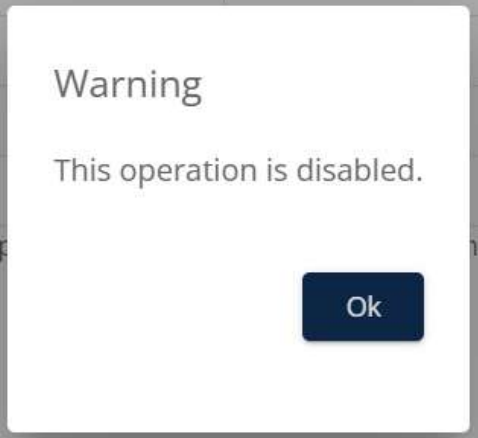


- (●) 0.407
- ( ) 0.237
- ( ) 0.655
- ( ) 0.776

A conglomerate has 25,000 clients. Following is a table that depicts the number of clients of the conglomerate in various categories.

| Category | No. of customers |
|---|---|
| Bronze | 8000 |
| Silver | 6000 |
| Gold | 6000 |
| Platinum | 5000 |

Assume a client is chosen at random. What is the p ...um class client?




- 0.3
- 0.6
- 0.5
- 0.2

Previous probabilities in Bayes Theorem that are changed with help of new available information are classified as _____

- ○ independent probabilities
- ◉ posterior probabilities
- ○ interior probabilities
- ○ dependent probabilities

Warning

This operation is disabled.

In a high school, 18% of all students play football and basketball. Also 32% of all students play football. What is the probability that a student plays basketball given that the student plays football?

- ○ 0.5
- ◉ 0.5625
- ○ 0.322
- ○ 0.178

Warning

This operation is disabled.

The probability of receiving one head and one tail in two flips of a coin is

- ○ Same as the probability of getting two heads
- ○ Less the probability of getting two heads in a
- ○ Same as the probability of getting two tails i
- ◉ Greater the probability of getting two heads

Warning

This operation is disabled.

A box contains two coins: a "regular coin" and one "fake two-headed coin (P(H)=1)". If we choose a coin at random and toss it twice. What is the probability that the first and the second coin toss, both result in Heads (H)?

- ○ 1/2
- ○ 1/4
- ◉ 5/8
- ○ 3/4

Warning

This operation is disabled.

You have invested in the stocks of a pharmaceutical company, as the FDA is close to a decision, whether to approve a particular medicinal drug X, produced by the company. There is a 60% chance of FDA approval, a 55% chance that the stock will double, and an 80% chance that the value of the stock will double if FDA approval is given. What is the probability that the FDA will approve the product and the value of the stock you hold will double?

- ○ 0.44
- ○ 0.80
- ◉ 0.48
- ○ 0.33