

PROBABILITY AND ENGINEERING STATISTICS- Lecture-1201 - meta

Dashboard / My courses
 / PROBABILITY AND ENGINEERING STATISTICS-Lecture-1201 - meta
 / Chapter One
 / Short Exam - Chapter One

Started on Monday, 12 October 2020, 4:16 PM

State Finished

Completed on Monday, 12 October 2020, 4:57 PM

Time taken 41 mins 8 secs

Grade 15.00 out of 15.00 (100%)

Question 1

Correct

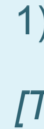
Mark 2.50 out of 2.50

Flag question

A certain computer becomes inoperable if two components A and B both fail. The probability that A fails is 0.015 and the probability that B fails is 0.028. However, the probability that B fails increases by a factor of 8 if A has failed.

Calculate the probability that computer A fails if B has failed.

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0.12

Your answer is correct.

Question 2

Correct

Mark 2.50 out of 2.50

Flag question

A and B are two disjoint events, assume the probability of A is 0.3 and the probability of B is 0.4.

1) Determine the $P(A \cap B)$.

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0

2) Determine the $P(A \cup B)$.

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0.7

Your answer is correct.

Question 3

Correct

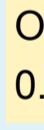
Mark 2.50 out of 2.50

Flag question

In the senior year of a high school graduating class of 88 students, 36 studied mathematics, 64 studied psychology, 46 studied history, 20 studied both mathematics and history, 25 studied both mathematics and psychology, 5 studied history but neither mathematics nor psychology, 10 studied all three subjects, and 8 did not take any of the three.

If a student who studied mathematics is selected, what is the probability that the student has also studied history?

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0.555555555555556

Your answer is correct.

Question 4

Correct

Mark 2.50 out of 2.50

Flag question

A factory has two production lines A and B, production line A works 7 days a week, production line B works only 5 days a week. Production line A produces 5000 items each day where 88% of the produced items are high quality and the rest are of medium quality. Production line B produces 3500 items each day where 68% of the produced items are high quality, 17% medium quality, and the rest are of low quality. All items produced after working for many weeks are accumulated in a warehouse.

What is the probability that a high-quality item is produced?

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0.813333333333333

Your answer is correct.

Question 5

Correct

Mark 2.50 out of 2.50

Flag question

A box contains 21 good parts and 5 bad parts. If two parts are drawn at random from the box with replacement. Determine then the probability of obtaining one good part and one bad part

[The answer should be a number rounded to five decimal places, don't use symbols such as %]



One possible correct answer is: 0.31065088757396

Your answer is correct.

Question 6

Correct

Mark 2.50 out of 2.50

Flag question

In a game, a person flips a fair coin twice, and based on the number of heads observed, he will be allowed to shoot so many times (equal to the number of heads observed) on a target. Assume the probability of hitting a target in one shot is 0.25.

What is the probability of hitting the target only once?

[The answer should be a number rounded to five decimal places, don't use symbols such as %]

One possible correct answer is: 0.21875

Your answer is correct.

[Finish review](#)

[Practice Essay Exam](#)

Jump to...

[Essay Exam - Chapter One](#)

Quiz navigation



Show one page at a time

[Finish review](#)