

Examrace

Statistics MCQs –Continuous Distributions Part 5

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81. A small bank branch has a single teller to handle transactions with customers. Customers arrive at the bank at an average rate of one every three minutes. What is the probability that it will be more than 3 minutes before the first customer arrives for the day after the bank has opened at 8am?

- a. 0.036
- b. 0.189
- c. 0.368
- d. 0.097
- e. 0.018

Answer: C

82. A small bank branch has a single teller to handle transactions with customers. Customers arrive at the bank at an average rate of one every three minutes. What is the probability that it will be more than 7 minutes before the first customer arrives for the day after the bank has opened at 8am?

- a. 0.036
- b. 0.189
- c. 0.368
- d. 0.097
- e. 0.018

Answer: D

83. A small bank branch has a single teller to handle transactions with customers. Customers arrive at the bank at an average rate of one every three minutes. What is the probability that it will be more than 12 minutes before the first customer arrives for the day after the bank has opened at 8am?

- a. 0.036
- b. 0.189
- c. 0.368

d. 0.097

e. 0.018

Answer: E

84. The time it takes a technician to fix a computer is exponentially distributed with a mean of 15 minutes. What is the probability that it will take the technician less than 10 minutes to fix a randomly selected computer?

a. 0.487

b. 0.373

c. 0.632

d. 0.393

e. 0.551

Answer: A

85. The time it takes a technician to fix a computer is exponentially distributed with a mean of 15 minutes. What is the probability that it will take the technician less than 7 minutes to fix a randomly selected computer?

a. 0.487

b. 0.373

c. 0.632

d. 0.393

e. 0.551

Answer: B

86. The time it takes a technician to fix a computer is exponentially distributed with a mean of 15 minutes. What is the probability that it will take the technician less than 15 minutes to fix a randomly selected computer?

a. 0.487

b. 0.373

c. 0.632

d. 0.393

e. 0.551

Answer: C

87. The time it takes a technician to fix a computer is exponentially distributed with a mean of 10 minutes. What is the probability that it will take the technician less than 5 minutes to fix a randomly selected computer?

- a. 0.487
- b. 0.373
- c. 0.632
- d. 0.393
- e. 0.551

Answer: D

88. The time it takes a technician to fix a computer is exponentially distributed with a mean of 10 minutes. What is the probability that it will take the technician less than 8 minutes to fix a randomly selected computer?

- a. 0.487
- b. 0.373
- c. 0.632
- d. 0.393
- e. 0.551

Answer: E

89. Flaws occur in telephone cabling at an average rate of 4.4 flaws per 1km of cable. What is the probability that the distance between two flaws exceeds 0.5km?

- a. 0.111
- b. 0.012
- c. 0.001
- d. 0.202
- e. 0.041

Answer: A

90. Flaws occur in telephone cabling at an average rate of 4.4 flaws per 1km of cable. What is the probability that the distance between two flaws exceeds 1km?

- a. 0.111
- b. 0.012

- c. 0.001
- d. 0.202
- e. 0.041

Answer: B

91. Flaws occur in telephone cabling at an average rate of 4.4 flaws per 1km of cable. What is the probability that the distance between two flaws exceeds 1.5km?

- a. 0.111
- b. 0.012
- c. 0.001
- d. 0.202
- e. 0.041

Answer: C

92. Flaws occur in telephone cabling at an average rate of 3.2 flaws per 1km of cable. What is the probability that the distance between two flaws exceeds 0.5km?

- a. 0.111
- b. 0.012
- c. 0.001
- d. 0.202
- e. 0.041

Answer: D

93. Flaws occur in telephone cabling at an average rate of 3.2 flaws per 1km of cable. What is the probability that the distance between two flaws exceeds 1km?

- a. 0.111
- b. 0.012
- c. 0.001
- d. 0.202
- e. 0.041

Answer: E

94. Textbooks are sold at a university bookshop at an average rate of 2 per hour. What is the probability that it will be less than 20 minutes before the next textbook is sold?

- a. 0.487
- b. 0.283
- c. 0.632
- d. 0.528
- e. 0.393

Answer: A

95. Textbooks are sold at a university bookshop at an average rate of 2 per hour. What is the probability that it will be less than 10 minutes before the next textbook is sold?

- a. 0.487
- b. 0.283
- c. 0.632
- d. 0.528
- e. 0.393

Answer: B

96. Textbooks are sold at a university bookshop at an average rate of 2 per hour. What is the probability that it will be less than 30 minutes before the next textbook is sold?

- a. 0.487
- b. 0.283
- c. 0.632
- d. 0.528
- e. 0.393

Answer: C

97. Textbooks are sold at a university bookshop at an average rate of 3 per hour. What is the probability that it will be less than 15 minutes before the next textbook is sold?

- a. 0.487
- b. 0.283
- c. 0.632

d. 0.528

e. 0.393

Answer: D

98. Textbooks are sold at a university bookshop at an average rate of 3 per hour. What is the probability that it will be less than 10 minutes before the next textbook is sold?

a. 0.487

b. 0.283

c. 0.632

d. 0.528

e. 0.393

Answer: E

99. The time it takes a technician to fix a computer is exponentially distributed with a mean of 15 minutes. What is the variance of the amount of time it takes a technician to fix a computer?

a. 225

b. 15

c. 0.004

d. 0.067

e. 20

Answer: A

100. The time it takes a technician to fix a computer is exponentially distributed with a mean of 15 minutes. What is the standard deviation of the amount of time it takes a technician to fix a computer?

a. 225

b. 15

c. 0.004

d. 0.067

e. 20

Answer: B

Frequently Asked Questions (FAQs)

Question no. 89

(- su...@ on 30-Jun-2020)

1 Answer

You can visit [Statistics Important Questions](#) to get many solved questions regarding Probability and Statistical methods.

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