

Math 221: Basic Statistics Extra Credit Assignment A

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

A customer service department of a phone company wishes to analyze its performance. It measures its success in a number of ways. An important part of its responsibilities relates to the speed with which troubles in residential service can be repaired. In addition, it wishes to ensure that a sufficient number of phone operators are available to handle incoming phone requests.

- (1) Past data indicates that the likelihood is .62 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment B

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

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- (1) Past data indicates that the likelihood is .64 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment C

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

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- (1) Past data indicates that the likelihood is .66 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment D

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

A customer service department of a phone company wishes to analyze its performance. It measures its success in a number of ways. An important part of its responsibilities relates to the speed with which troubles in residential service can be repaired. In addition, it wishes to ensure that a sufficient number of phone operators are available to handle incoming phone requests.

- (1) Past data indicates that the likelihood is .68 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment E

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

A customer service department of a phone company wishes to analyze its performance. It measures its success in a number of ways. An important part of its responsibilities relates to the speed with which troubles in residential service can be repaired. In addition, it wishes to ensure that a sufficient number of phone operators are available to handle incoming phone requests.

- (1) Past data indicates that the likelihood is .70 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment F

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

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- Supply all of your answers to this lab on an Excel spreadsheet that includes your name, course number and section, and data set letter.

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- (1) Past data indicates that the likelihood is .72 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment G

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

- You can obtain “some” information regarding the use of BINOMDIST in the blue box on Page 258. Additional information can be found using Excel’s Help facilities.
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- (1) Past data indicates that the likelihood is .74 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment H

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

Directions:

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- (1) Past data indicates that the likelihood is .76 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment I

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Title: Computing Binomial Probabilities**Objectives:**

- To practice using Excel to compute binomial (BINOMDIST) probabilities.
- To understand when the distribution is appropriate.

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- (1) Past data indicates that the likelihood is .78 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?

Math 221: Basic Statistics Extra Credit Assignment J

Due 6/12/21

Title: Computing Binomial Probabilities**Objectives:**

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- (1) Past data indicates that the likelihood is .80 that any reported problem with residential service can be repaired on the same day.
 - (a) For a specific 16 problems reported on a given day, construct a table indicating the probability that a certain number of problems will be repaired on the same day. In other words, find the probability that none are repaired, one is repaired, two are repaired, etc.
 - (b) Using any method, compute the probability that
 - (i) *at least* 8 problems will be repaired on the same day.
 - (ii) *fewer than* 12 problems will be repaired on the same day.
 - (iii) *more than* 6 but *fewer than* 14 problems will be repaired on the same day?