

Makeup Classwork and Homework Assigned for Lectures 1 - 22

updated 27 April 2009

This handout provides all makeup classwork and homework assignments that are assigned during each class. Students will miss 5 points for every lecture they miss, unless they complete the Makeup Classwork for that lecture. If a quiz is given during the lecture missed, the student must make up the quiz during the following office hour to get credit. The maximum score given to a student for a makeup quiz will be the average of quiz scores from all other in-class quizzes taken by that student. The class schedule provides information on what lectures a quiz will be given.

Lecture 1

Makeup Classwork (CI-1)

- read handout from week 1 (see website)
- roll 1 die 100 x, tally outcomes and draw statistical distribution
- roll 2 dice 200 x, tally outcomes

Homework 1 Assigned

1. Draw Statistical distribution for your rolling 2 dice
 3. How close was your statistical distribution to the true distribution?
 4. What is the true probability of rolling a 9 or above for rolling two dice?
 5. What is the true probability of rolling a 5 or below for rolling two dice?
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Lecture 2

Makeup Classwork (CI-2)

- read handout from week 1
- which outcomes occur (the most common) $2/3$ (67%) of the time for rolling 3 dice?
- Which outcomes occur (the most common) $2/3 + (1/3)*(1/3) = 7/9$ (89%) of the time for rolling 3 dice?
- Which outcomes occur (the least common) $2/9 = 11\%$ of the time for rolling 3 dice?

Homework 2 Assigned

- see website for homework 2 handout
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Lecture 3

Makeup Classwork (CI-3)

- (1) Define the following terms: Statistics, Descriptive Statistics, Data Set, Element, Observation, Inferential Statistics, Population, Sample, Survey, Census, Representative Sample, Random Sample, Nonrandom Sample, sampling with replacement, sampling without replacement,
- (2) Example 1-1, pg 16

Homework 3 Assigned

pg 19-20: 1.30, 1.33, 1.35, 1.37, 1.39

Lecture 4

Makeup Classwork (CL-4)

- (1) example 2-1 pg 28
- (2) example 2-2 pg 29
- (3) pg 31, draw pie-chart
- (4) exercise 2-4, pg 32
- (5) example 2-3 pg 36 (see formula for class width in yellow box, same page)
- (6) example 2-4, pg 38
- (7) draw frequency histogram for "total home runs", see pg 39

Homework 4 (Hw-4)

pg 49-50: # 2.22 through 2.26

- pg. 63: # 2.66, 2.70, 2.73, 2.85, 2.92
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Lecture 5

Makeup Classwork (CL-5)

- define mean, median, and mode
- example 3-2
- example 3-3
- example 3-4
- exercise 3-11, pg 83
- example 3-12
- example 3-13

Homework 5 (HW-5)

pg 83: # 3.11, 3.12, 3.16, 3.22

pg 92: # 3.43, 3.44, 3.54

Lecture 6

Makeup Classwork (CL-6)

- example 3-12
- read 3.2.3
- draw Fig 3.9
- example 3-19
- exercise pg 105, #3.83
- example 3-20
- example 3-21
- draw Figure 3.5.2
- example 3-22
- example 3-23
- example 3-24

Homework 6 (HW-6)

(For each problem, draw the bell-shaped symmetric curve, labeling x-axis, the mean, and the mean \pm one standard deviation. Think about which of the given data is “standard” and which is “not standard”.)

pg 116: # 3.111, 3.113,

pg 105: # 3.82, 3.84,

pg 110: # 3.90, 3.91

pg 113 # 102 103

Lecture 7

Makeup Classwork (CL-7)

- Define a quartile, pg 106
- Define Interquartile Range, IQR, pg 106
- Example 3-20
- Define how to find a percentile, pg 109
- Example 3-22
- Define how to find a percentile rank of a value, pg 109
- Example 3-23
- pg. 110, # 3.93

Homework 7 (HW-7)

pg 110, # 3.90 3.91 3.94

Lecture 8

Makeup Classwork (CL-8)

- Define the two rules of a probability distribution (pg 192)
- Example 5-2

Homework 8 (HW-8) (Due Lecture 10)

pg 196, # 5.8, 5.10, 5.13

STUDY FOR EXAM – Extra Credit Packet Due Lecture 10

Lecture 9

Makeup Classwork (CL-7)

- EXAM 1

No Homework Assigned Today (HW-8 is due on Lecture 10)

Lecture 10

Makeup Classwork (CL-10)

- Define mean of a discrete random variable
- Example 5-5
- Define standard deviation of a discrete random variable
- Example 5-7
- Define continuous random variable (pg 248 and pg 190)
- Review Section 6.1
- Review Section 6.2

Homework 9 (HW-9)

pg 204 # 5.23, 5.25, 5.30 (draw the normal distribution, labeling mean, and mean +/- one standard

deviation

hand-out provided in class on finding shaded areas under Normal Distribution curve

Lecture 11

Makeup Classwork (CL-11)

- Define Standard Normal Distribution
- Define z-values / z-scores
- Example 6-1
- Pg 263, # 6.24

Homework 10 (HW-10)

Pg 263: #'s 6.7, 6.8, 6.9, 6.15, 6.17, 6.21, 6.23 (draw all normal distribution graphs, showing your work – use the table on pgs C19-C20)

Lecture 12

Makeup Classwork (CL-12)

- Example 6-6
- Pg 269 # 6.28
- Example 6-12
- Pg. 274, # 6.38

Homework 11 (HW-11)

pg. 269: # 6.27, 2.29, 6.31, 6.33, 6.35

(draw normal distribution graphs, with x-axis, and z-axis)

pg. 274: # 6.37, 6.39, 6.41, 6.43, 6.44, 6.46, 6.48

(clearly write what the random variable is for each word problem, what the true mean and standard deviation is, and what the question is asking for in terms of the probability of the random variable taking on a certain range of values. Also, draw the normal distribution graphs, with x-axis and z-axis)

Lecture 13

Makeup Classwork (CL-13)

- Examples in section 6.6

Homework 12 (HW-12)

pg. 279 - # 6.53, 6.55, 6.57, 6.59, 6.61

Lecture 14

Makeup Classwork (CL-14)

- Examples from section 7.1 through 7.5

Homework 13 (HW-13)

pg. 316, # 7.2, 7.5

pg 305, ## 7.12, 7.13, 7.15, 7.19, 7.23

pg. 311, #7.27, 2.30, 7.33, 7.34, 7.36

pg. 316, #7.43, 7.50, 7.54, 7.57, 7.59

Lecture 15

Makeup Classwork (CL-15)

- Review / sample word problems
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Lecture 16

Makeup Classwork (CL-16)

- review /sample word problems
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Lecture 17

Makeup Classwork (CL-17)

- Exam 2
-

Lecture 18

Makeup Classwork (CL-18)

- Presentation - Real world statistics research from my PhD
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Lecture 19

Makeup Classwork (CL-19)

- examples from section 7.7 and 7.8

Homework (HW-14)

Pg 323 - # 7.61, 7.69, 7.71,

Pg 327 - # 7.85, 7.87, 7.89

Lecture 20

Makeup Classwork (CL-20)

- examples from 8.1 – 8.3

Homework 15 (HW-15)

pg 348- #8.1, 8.2, 8.7, 8.11, 8.13, 8.23, 8.25, 8.28

read/skim sections 8.4 and 8.5

Lecture 21

Makeup Classwork (CL-21)

- Examples from 8.4 and 8.5

Homework 16 (HW-16)

pg 357 - # 8.37, 8.40, 8.47, 8.55, 8.60

pg 365 - # 8.69,, 8.73, 8.75, 8.83, 8.85, 8.91

Lecture 22

Makeup Classwork (CL-22)

- Examples from 9.1 and 9.2

Homework 17 (HW-17)

pg. 386 - # 9.1, 9.2, 9.3, 9.5, 9.6, 9.7, 9.9

pg 397 - # 9.11, 9.12, 9.14 9.17, 9.19, 9.21, 9.23, 9.25, 9.27, 9.35, 9.36, 9.39, 9.45
