

# Math 148 Final Exam Suggested Problems

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The final exam will take place Wednesday, December 15th from 12:50pm-2:50pm in LH 1. The final exam will be cumulative. This document is a list of suggested problems to help you study. Please note that there may be material on the final exam that is not covered by this study guide.

## Chapters 1-5: Displaying and Understanding Data

Chapter	Problems
Chapter 3	pg. 74: 21, 29
Chapter 4	pg. 101: 15, 29
Chapter 5	pg. 134: 7, 11

## Chapters 10-12: Sampling and Experiments

Chapter	Problems
Chapter 11	pg. 313: 7, 11
Chapter 12	pg. 336: 19, 61

## Chapters 6-8: Scatterplots and Linear Regression

Chapter	Problems
Chapter 6	pg. 173: 23, 39
Chapter 7	pg. 205: 13, 43, 51
Chapter 8	pg. 237: 35, 37

## Chapters 13-16: Probability

Chapter	Problems
Chapter 13	pg. 361: 39, 43
Chapter 14	pg. 383: 21, 33
Chapter 15	pg. 407: 9, 33
Chapter 16	pg. 431: 37, 39

## Chapters 19, 20, 22, 23, 24, 26: Hypothesis testing

Note: See also the review on page 733-734.

Test	Worked Example	Problems
One proportion z-test	Ch. 19 pg. 502	pg. 514: 21, 23
One mean t-test	Ch. 20 pg. 530	pg. 540: 9, 11, 37
Two proportion z-test	Ch. 22 pg. 594	pg. 616: 39, 41
Two mean t-test	Ch. 22 pg. 604	pg. 616: 59, 77
Paired t-test	Ch. 23 pg. 634	pg. 646: 27, 39, 40
Goodness of Fit	Ch. 24 pg. 659	pg. 680: 13
Homogeneity	Ch. 24 pg. 665	pg. 680: 43, 45
Independence	Ch. 24 pg. 671	pg. 680: 39
ANOVA	Ch. 26, pg. 762	pg. 774: 5, 9, 17

## Chapters 17, 18, 21: More about sampling, tests and confidence intervals

Chapter	Problems
Chapter 17: Sampling Distributions	pg. 463: 1, 55
Chapter 18: Confidence Intervals	pg. 488: 15, 16, 17
Chapter 21: More about tests and intervals	pg. 570: 3, 4, 39

## Chapters 25 and 28: Inferences for Regression

Number of Predictors	Worked Example	Problems
One	Ch. 25 pg. 701-704	pg. 718: 25, 35, 41
Multiple	Ch. 28 pg. 823-825 and Ch. 28 pg. 828-832	pg. 838: 13, 15, 19