

Final Exam Text Review Questions | MDM4U

Completion of this review is a **good start** to being ready for our final exam on **Monday, June 26th**. Additional review questions may be given in class as we do review activities in preparation for the exam. You should also study old tests and quizzes, as many exam questions are similar to those you've already completed at some point in the year!

Your unit test reviews will also be a valuable resource, as they cover many helpful concept review questions.

Course Review:

Chapters 1-3: p. 138 #1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 13, 15, 16, 18, 19, 20, 21

Chapters 4 – 6: p. 314 #1, 3, 4, 5, 9, 10, 11, 12

Chapters 7-8: p. 438 #3, 5, 6, 7, 8, 10

Extra Review Problems:

The following sets of questions contain problems that we did as homework questions, as well as others. I suggest using the lists below as checklist... crossing out questions you've answered correctly, and circling questions that are giving you problems. The volume of questions given isn't meant to daunt you, but to give you as much practice as possible. Do what you like! In a post-secondary math course, you won't get any review. Classes end and then you prepare for your exam on your own.

Unit 1: Introduction to Probability

Simple Probabilities – p. 13 #1, 2, 3, 4, 8, 9, 10, 14

Theoretical Probability – p. 21 #1, 2, 3, 4, 5, 6, 7, 8, 9, 14

Compare Experimental and Theoretical Probabilities – p. 32 #1, 2, 8

Mutually Exclusive Events – p. 42 #1, 2, 3, 5, 6, 7, 11, 14

Independent and Dependent Events – p. 53 #1, 2, 3, 4, 6, 7, 8, 11

Pascal's Triangle – p. 251 #1, 4

Applying Pascal's Method – p. 256 #2, 4, 5, 6, 7, 8, 9

Unit 2: Organized Counting

Organized Counting – p. 67 #1, 2, 3, 4, 6, 7, 13

The Fundamental Counting Principle – p. 71 #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 1, 13, 15, 20, 22, 23

Permutations and Factorials – p. 79 #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14

The Rule of Sum – p. 86 #1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 16

Probability With Permutations – p. 93 #1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 14

Permutations With Non-Ordered Elements – p. 108 #1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14

Combinations – p. 113 #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Problem Solving With Combinations – p. 120 #1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 14

Combinations and Pascal's Triangle – p. 126 #1, 2, 4, 5, 8, 9, 10, 11

Probability Using Combinations – p. 132 #1, 2, 3, 4, 5, 6, 7, 8, 11, 14

Unit 3: Discrete Probability Distributions

Probability Distributions – p. 151 #1, 2, 4, 5, 6, 7

Uniform Distributions – p. 157 #1, 2, 3, 4, 5, 8, 11

Binomial Distributions – p. 167 #1, 2, 3, 5, 6, 7, 8, 9, 10, 12

Unit 4: One-Variable Statistics

Principles of Data Collection – p. 210 #1, 2, 4, 7, 8

Bias – p. 240 #1, 2, 4, 12

Measures of Central Tendency – p. 263 #1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 14, 16

Measures of Spread – p. 275 #1, 2, 3, 4, 5, 7

Standard Deviation and Z-Scores – p. 286 #1, 2, 3, 4, 5, 6, 7

Unit 5: Continuous Probability Distributions

Normal Distribution and Z-Scores – p. 341 #1, 2, 3, 8

Applications of the Normal Distribution – p. 349 #1, 2, 3, 4, 5, 6, 7, 8, 9

Unit 6: Two-Variable Statistics

I did not follow the textbook for the last part of our course. Study your notes.

Note: You will not be performing any regressions on the exam. However, you should understand how to make predictions (interpolation and extrapolation) using equations of best fit, and be able to comment on the reliability of models based on the r -value, and r^2 -value.