

Math 10 Exam 1 Topics
Thursday, April 21, 2016

You may bring to the exam:

- Your calculator – please check batteries
- A pen or pencil
- 18 ½ by 11” page of handwritten notes (both sides)

The exam will cover:

Chapter 1

- Key Statistics Terms – Population, Sample, Parameter, Statistic, Variable, Data
- Types of Data – Qualitative, Discrete quantitative, Continuous quantitative
- Relative Frequency Tables
- Sampling Methods – SRS, Stratified, Cluster, Systematic, Convenience
 - Is a given sample representative?
- Fairness and bias question design

Chapter 2

- Drawing and interpreting histograms (discrete data only)
- Drawing and interpreting boxplots
- Median and quartiles (Q1, Q3)
- Percentiles
- Sample mean \bar{x} , median and mode
- Sample standard deviation s_x (calculator only)
 - Comparing data from different groups using s_x
- Outliers
 - IQR Method – less than $Q1 - (1.5)(IQR)$ or more than $Q3 + (1.5)(IQR)$
 - Standard deviation method – more than 3 std devs away from \bar{x}

Chapter 12

- Independent and Dependent Variables
- Finding the equation of a regression line using your calculator
- Making predictions using the regression line
- Correlation Coefficient
 - Positive or negative?
 - Determining if it is significant using Critical Values Table
- Finding outliers using calculator program