Pearson MyLab Statistics: Triola, Mario F. Elementary Statistics with Integrated Review. 13 edition . Pearson Education, Inc.

Week #	Math 105 Topics	HW Week	MSL Section	Homework Topic	Math 005 Suggested Lesson	Skills Homework
#1	Course Introduction, Summarizing and Collecting Data 1.1,1.2,1.3 Related Video Lessons: Lesson 1, 2, 3	**#1**	1.1	Analyze sample data relative to context, source, and sampling method.	Benchmark fractions and decimals. Converting between and estimating fractions, decimals, and percents.	*Round Decimals. 2.IR.**2**,3,**4**,**5**,8,10,11 *Write a Fraction in Lowest Terms. 2.IR **12**,14,**16**,17 *Calculate relative frequencies. 2.IR **32**,34,**37**,40 *Evaluate expressions and formulas. 3.IR **32**,34,36,**37** *Apply operations to fractions. 4.IR **1**,3,**5**,6 *Apply operations to decimals. 4.IR 14,**15**,16,**17** *****Convert from Fraction notation to Decimal notation IR(&).**2.22** *Round numbers to a specified decimal place (&) JITR.14.**5**,6 *Solving Equations using the multiplication principle. & 2.2.19,23,**27**,29
			1.2	Distinguish between a parameter and a statistic.		
			1.4$	Distinguish between observational studies and controlled experiments.		
			1.4$	Identify potential problems and/or improvements for a research study.		
			1.4$	Studies vs. experiments and causation, explanatory, response, confounding variables		
			1.1*	Explain the process of statistics.		

#2	Graphing Data, Measures of Center Ch 2, 3.1 Related Video Lessons: Lesson 4, 5	**#2**	2	Displaying Data- types of graph	Display data Mean as a balancing point	*Review the skills for graphing. 2.IR 58,59 *Find the average, median, and mode of a set of numbers and solve applied problems. *Draw Bar Graphs. *Extract and interpret data from bar graphs. *Draw line graphs. *Answer questions about the sample and population involved in a given study. *Interpret the results of a survey. *Find and interpret the mean, median, and mode. *Obtain the mean, median, and mode of a data set. *Describe the notation for the sample mean. *Measures of Center
			3.1	Measures of center- mean, median, outliers		
			3.2	Mean, median affected by outliers		
			3.3	variation		
#3	Measures of variation, relative standing, outliers 3.1,3.2,3.3 Related Video Lessons: Lesson 6	**#3**	3.3	Develop the ability to construct a boxplot from a set of data.	Venn Diagrams And/Or/Not	Write a fraction in lowest terms 2.IR 13,**15** Convert between decimals, fractions, and percents 2.IR**18**,**19**,20,21,25,**26**,27 Apply operations to fractions 4.IR 8, **9**,10 Develop the Ability to construct a boxplot from a set of data. 3.3. **30**,32,**33**,37, RA-4
			3.3	Identify percentile values and quartile values from a set of data.		
			3.3	Develop the ability to construct a boxplot from a set of data.		
			$2.5^{!}$	Use the values in a five-number-summary to identify and compare distributions.		

			3. 4*	Determine and interpret quartiles and the interquartile range ; check a set of data for outliers.		Develop the ability to measure the center of data by finding mean, median, mod,... 3.1.RA-2, 5,7,10,11,**17** Convert from fraction notation to decimal notation (&) IR.2.5,7**,8**,9 Finding the weighted mean (@) 7.2.**13**,15 FInding the range and midrange of a data set (@) 7.2.**30**,32
			3. 4*	Determine and interpret quartiles and the interquartile range ; check a set of data for outliers.		
#4	Simulation, Poisson and Normal Distributions 6.1,6.2 Related Video Lessons: Lesson 7, 8	**#4**	6.2	Find the probability of some range of values in a normal distribution.	Intro to the Normal Curve (What's normal) and Z-scores with the normal Curve	Convert from fraction notation to percent notation. Solve application problems. Construct Venn diagrams. Identify probabilities as values between 0 and 1 that indicate the likelihood of events. List or determine the number of outcomes of an event. Use the basic properties of probabilities. Draw circle graphs. Use the basic properties of probabilities. Determine whether a collection of events is mutually exclusive.
			6. 3*	Compute probabilities of a Poisson random variable.		
			6. 3*	Find the mean and standard deviation of a Poisson random variable.		

						Obtain a sample standard deviation.
#5	Application of Normal Distribution 6.2 Related Video Lessons: Lesson 9, 10	**#5**	6.2	Compute probabilities from the normal distribution	Solve Linear one step Equation, Solve linear formula with one variable- multi-step/order of operations Alternative: z-scores and the normal curve. Practice finding area.	Apply the order of operations 3.IR.2,**5,**7,**9** Evaluate expressions and formulas 3.IR.33,**38**,39,40,**43**,46 Find Area 6.IR.1,**2,3** Interpret Inequality Notation 6.IR.4,**5,6**,7 Evaluate formulas for normal probability distributions 6.IR.**8**,9,10,11,**12**,13,**14**, 15 Review due Monday
			6.2	Find x scores corresponding to regions under the curve representing a normal distribution		
			6.2	Find probability of a range in a normal distribution		
			6.2	Solve application problems involving probabilities and corresponding x scores from the normal distribution		
#6	Exam 1, Association Rules Ch. 4	**#6**	4.1	Identify probabilities as values between 0 and 1 that indicate the likelihood of events.	MnM's Activity introduction to statistical significance, sampling variability, confidence	Review due beginning of this week (9/28)
			4.1	Calculate the probability of a simple event using the classical approach method.		
			4.1	Calculate the probability of a simple		

				event using the relative frequency method.		
			4.1	Determine the odds of an event.		
			4.2	Define the complement of an event and calculate the probability of that complement.		
			4.2	Apply the multiplication rule by adjusting for events that are not independent.		
			4.2	Distinguish between independent events and dependent events.		
			4.2	Apply the addition rule by correctly adjusting for events that are not disjoint (overlapping).		
#7	Sampling Distributions, Estimating a Population Proportion 6.3,6.5,7.1 Related Video Lessons: Lesson 13	**#7**	7.1	Construct and interpret a confidence interval estimate of a population proportion.	No Activity Suggestion: Deconstruct confidence Intervals and identify parameters	*Apply operations to fractions. *Evaluate factorials. *Evaluate nPr and nCr. *Determine the intersection, union, and complement of two sets.
			7.2	Construct and interpret a confidence interval estimate of a population mean.		
#8	Estimating a Proportion, Estimating a Population Mean 7.1,2 Related Video Lessons:	**#7**		Continue Week 7 Homework	Tea Lady: Introduction to the ideas behind confidence testing.	*Find the middle value for an interval given in either interval notation or as an inequality. *Find the distance from the middle value of an interval to its endpoints. *Write and interpret three

	Lesson 14, 15					different forms of intervals (as used for confidence intervals). *Evaluate formulas used for confidence intervals.
# 9	Intro to Hypothesis testing, Hypothesis testing for a proportion 8.1,8.2 Related Video Lessons: Lesson 16, 17, 18	**#9**	8.1	Understand concepts related to hypothesis testing	Algebraic Reasoning Alternative: Hypothesis Testing Practice for proportion	Evaluate formulas for hypothesis testing. 8.IR.**1**,2 (x2) Identify the null and alternative hypothesis 8.1.**5** (x2) Make subjective conclusions about claims 8.1.9,**11** Understand the concepts related to hypothesis testing 8.1. **33**, RA-2, 3,**4** Identify and Interpret Values given in technology displays 8.2.**5,7** Basics of Hypothesis Texting CQL.10.**1**,2,3,**15**,25,29,36
			8.2	Hypothesis Test- proportions		
#10	Hypothesis Test for a Mean 8.3 Related Video Lessons: Lesson 19	**#10**	8.1	Understand concepts related to hypothesis testing	No Lesson: Bridge algebraic reasoning and linear functions Alternative: Hypothesis Testing Practice for mean Connecting Hypothesis testing and confidence	Use sample data to conduct a formal hypothesis test of a claim made about a population mean. Hypothesis Tests for a Mean (Sigma Known) Perform a significance test about a proportion. Perform a significance test about a mean.
			8.2	Hypothesis Test- proportions		
			8.3	Hypothesis Test- means		

					intervals	Test 2 Review
#11	Exam 2, Hypothesis test for 2 proportions 9.2 Related Video Lessons: Lesson 20	**None**		Exam #2	No Lesson: Solving Inequalities	Review due beginning of this week (11/2)
#12	Hypothesis test for 2 Means 9.2 Related Video Lessons: Lesson 21	**#12**	9.1	Confidence Intervals- difference between two proportions	Solve a linear formula with two variables	Evaluate formulas for two sample hypothesis testing.
			9.2	Hypothesis Testing - two proportions		
#13	Two-way tables, Chi-square tests of independence 11.3 Related Video Lessons: Lesson 22	**#13**	11.3	Perform Chi-square test of independence	Two Way tables	Find and Interpret Slope 10.IR.1,5,**6**,7,**8,9**,10,12,13 Find and Interpret the y-intercept of a line 10.IR. **27**,29,31,**33** Find Values from a Linear Equation or Graph 10.IR.**34**,35,**36**,37,40 Graph a Linear Equation 10.IR.**41**,43,**45**,48,**50**

#14	Linear Regression 10.1,2 Related Video Lessons: Lesson 23, 24	**#14**	7.1	Use and interpret scatterplots, association, & correlation	Linear Regression	Find and Interpret Slope 10.IR.**14**,15,19,20,21**,22** ,23**,24**,**25**,26 Find Values from a Linear Equation or Graph 10.IR.**38,39** Graph a Linear Equation 10.IR. **46** Find and Interpret a linear model (y=mx+b and yhat=b0+b1x) 10.IR.51,53,**55,57**,60,**63** ,66,**69**,73,**76**
			8.1	Find & interpret slope, intercept, and equation		
			8.1	Write & interpret a linear regression equation		
			4.3	Interpret or setup a regression equation and/or scatterplot		
#15 (dead)	Linear Regression 10.2	**#15**	7.1	Use linear regression models to estimate values	Support and Review for Aleks and 105 Final	Review due Monday (12/14)
			7.1	Analyze & interpret residuals		
			7.1	Find and/or interpret slope, intercept, or linear regression model		
			7.1	Find, interpret, and/or use correlation or correlation squared		
#16 (final)				Final	No Meeting	

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