Supporting the Underprepared Student

Quantitative Reasoning

Dana Center Mathematics PATHWAYS

Students in a regular Quantitative Reasoning class will complete Preview Assignments prior to coming to class that will prepare them to successfully engage with the In-Class Activities. Students in the co-requisite class will complete worksheets during the support class that will enable them to go home and successfully engage in the Preview Assignment on their own.

Lesson Number	Co-Requisite Worksheet Content	Preview Assignment Content	In-Class Activity Content
1A	Convert fractions to decimals, rounding	There is no Preview Assignment for this lesson.	Data collection, working as a group to reach consensus
1B	There is no Co-Requisite Worksheet for this lesson.	There is no Preview Assignment for this lesson.	Student success focus (learning community)
1C	Plurality vs. majority; calculate unit percentages to determine the whole	There is no Preview Assignment for this lesson.	Percentages; runoff elections and preference schedules
1D	Preference schedules	There is no Preview Assignment for this lesson.	The Borda count method, weighted values
2A	Dotplots, histograms, and boxplots	Dotplots, histograms, boxplots, mean and median	Use dotplots to make suggestions; construct dotplots and find the mean and median of a data set
2B	There is no Co-Requisite Worksheet for this lesson.	Student success focus (working effectively in a group)	Student success focus (study groups)
2C	Compare and contrast boxplots	There is no Preview Assignment for this lesson.	Read data presented in tabular form, compare data, look for data trends
3A	Solve percent equations	Percentages, interpreting poll results	Sample groups, inference

Lesson Number	Co-Requisite Worksheet Content	Preview Assignment Content	In-Class Activity Content
3B	Rates and unit rates	Mean, unit rates. Central Limit Theorem and normal distributions	Mean, Central Limit Theorem
3C	Mean, deviation from the mean	Standard deviation, notation	Standard deviation and normal distributions, spreadsheet formula for standard deviation
4A	Operations with fractions	Convert probabilities to a “1 in ___ chance” statement	Calculate probability of independent events involving “and” and “or” statements
4B	Chance and probability, probability notation	Determine simple and conditional probabilities of events; dependent and independent events	Calculate conditional probabilities for dependent events
5A	Conversion factors	Dimensional analysis	Using conversions to compare data
5B	Reference values, comparing values with percentages, reading spreadsheets	Calculate cost of living averages	Make and justify decisions and evaluate claims using index numbers
5C	Percentages of the whole, calculating percentages with spreadsheets	Mean and weighted average	Use weighted averages to analyze data and draw conclusions
5D	Population data and percentages, spreadsheets calculations	Sum and mean of data set, percentages	Expected value, making predictions based on data analysis

Complete Alignment Coming Soon!