

Practical Math / Part A

COURSE DESCRIPTION: In K12 High School Practical Math, students learn about the many practical applications of math in everyday life. Topics of study in this course include statistics, probability, statistical graphs, regression, finance, budgeting, and mathematical modeling. Proficiency is measured through frequent online and offline assessments, as well as class participation. Project units also allow students to apply and extend their math skills for problem solving.

PREREQUISITES: Algebra 1 and Geometry

COURSE LENGTH: One Semester

REQUIRED TEXT: Practical Math: Reference Guide and Problem Sets.

MATERIALS LIST: No required materials for this course.

COURSE OUTLINE:

Unit 1: Working with Data

- Semester Introduction
- Foundations
- Measures of Center 1
- Measures of Center 2
- Measures of Center 3
- Statistical Graphs 1
- Statistical Graphs 2
- Statistical Graphs 3
- Measures of Spread 1
- Measures of Spread 2
- Measures of Spread 3
- Practice and Assess
- Unit Review
- Unit Test

Unit 2: Project: Statistics in the Media

- Project Research 1
- Project Research 2
- Project Draft 1
- Project Draft 2
- Project Completion

Unit 3: Connections Between Data

- Foundations
- Your Choice
- Scatter Plots 1
- Scatter Plots 2
- Scatter Plots 3
- Correlation 1
- Correlation 2
- Correlation 3
- Linear Regression 1
- Linear Regression 2
- Linear Regression 3
- More Regression 1
- More Regression 2
- More Regression 3
- Unit Review
- Unit Test

Unit 4: Project: Population Analysis

- Project Research 1
- Project Research 2
- Project Draft 1
- Project Draft 2
- Project Completion

Unit 5: Uncertainty

- Foundations
- Permutations and Combinations 1

- Permutations and Combinations 2
- Permutations and Combinations 3
- Probability 1
- Probability 2
- Probability 3
- Expected Value 1
- Expected Value 2
- Expected Value 3
- Unit Review
- Unit Test

Unit 6: Project: Spinner Games

- Project Research 1
- Project Research 2
- Project Draft 1
- Project Draft 2
- Project Completion

Unit 7: Math Models

- Foundations
- Variation 1
- Variation 2
- Variation 3
- Sequences 1
- Sequences 2
- Sequences 3
- Matrices 1
- Matrices 2
- Matrices 3
- Geometric Models 1
- Geometric Models 2
- Geometric Models 3
- Unit Review
- Unit Test

Unit 8: Semester Review and Test

- Semester Review
- Semester Test