

Prep for Statistics

This course covers the topics outlined below. You can customize the scope and sequence of this course to meet your curricular needs.

Curriculum (62 topics + 17 additional topics)

- Numbers (16 topics)
 - ◆ Integers (6 topics)
 - ◇ Integer addition: Problem type 1
 - ◇ Integer subtraction: Problem type 1
 - ◇ Integer multiplication and division
 - ◇ Order of operations with whole numbers
 - ◇ Order of operations with whole numbers and grouping symbols
 - ◇ Order of operations with integers
 - ◆ Decimals and Percents (10 topics)
 - ◇ Decimal place value: Hundreds to ten thousandths
 - ◇ Rounding decimals
 - ◇ Multiplication of a decimal by a power of ten
 - ◇ Division of a decimal by a power of ten
 - ◇ Signed decimal addition and subtraction
 - ◇ Converting between percentages and decimals
 - ◇ Converting a percentage to a fraction in simplest form
 - ◇ Converting a fraction to a percentage: Denominator of 20, 25, or 50
 - ◇ Writing a ratio as a percentage
 - ◇ Computing a percentage from a table of values
- Algebraic Expressions (8 topics)
 - ◆ Evaluating Expressions (5 topics)
 - ◇ Evaluating expressions with exponents: Problem type 1
 - ◇ Order of operations with integers and exponents
 - ◇ Evaluating an algebraic expression: Whole numbers with two operations
 - ◇ Evaluating a quadratic expression: Integers
 - ◇ Evaluating a linear expression: Integer multiplication with addition or subtraction
 - ◆ Combining Like Terms (2 topics)
 - ◇ Distributive property: Whole number coefficients
 - ◇ Combining like terms: Integer coefficients
 - ◆ Summation Notation (1 topics)
 - ◇ Introduction to summation notation
- Linear Equations (5 topics)
 - ◆ Writing Equations (1 topics)
 - ◇ Translating a sentence into a one-step equation
 - ◆ Solving Equations (4 topics)
 - ◇ Introduction to algebraic symbol manipulation
 - ◇ Solving a two-step equation with integers
 - ◇ Solving a linear equation with several occurrences of the variable: Variables on the same side and distribution
 - ◇ Solving a linear equation with several occurrences of the variable: Variables on both sides and

distribution

- Lines in the Coordinate Plane (9 topics)
 - ◆ Graphs and Intercepts (6 topics)
 - ◇ Reading a point in the coordinate plane
 - ◇ Plotting a point in the coordinate plane
 - ◇ Y–intercept of a line
 - ◇ X– and y–intercepts of a line given the equation in standard form
 - ◇ Graphing a line given its x– and y–intercepts
 - ◇ Graphing a line given its equation in slope–intercept form
 - ◆ Slope (3 topics)
 - ◇ Finding slope given the graph of a line on a grid
 - ◇ Writing an equation of a line given the y–intercept and another point
 - ◇ Graphing a line through a given point with a given slope
- Descriptive Statistics (18 topics)
 - ◆ Types of Variables (2 topics)
 - ◇ Classification of variables and levels of measurement
 - ◇ Discrete versus continuous variables
 - ◆ Graphical Displays (10 topics)
 - ◇ Interpreting a line graph
 - ◇ Interpreting a bar graph
 - ◇ Interpreting a double bar graph
 - ◇ Interpreting a pie chart
 - ◇ Computations from pie charts
 - ◇ Interpreting a stem–and–leaf display
 - ◇ Histograms for grouped data
 - ◇ Interpreting relative frequency histograms
 - ◇ Frequency polygons for grouped data
 - ◇ Cumulative distributions and ogives
 - ◆ Descriptive Measures (6 topics)
 - ◇ Mean, median, and mode: Computations
 - ◇ Mean, median, and mode: Comparisons
 - ◇ Weighted mean: Tabular data
 - ◇ Rejecting unreasonable claims based on average statistics
 - ◇ Percentiles
 - ◇ Sample standard deviation
- Counting and Probability (6 topics)
 - ◆ Counting (1 topics)
 - ◇ Factorial expressions
 - ◆ Probability (5 topics)
 - ◇ Introduction to the probability of an event
 - ◇ Probability of an event
 - ◇ Experimental and theoretical probability
 - ◇ Outcomes and event probability
 - ◇ Probabilities involving two rolls of a die: Decimal answers
- Other Topics Available(*) (17 additional topics)
 - ◆ Numbers (4 topics)
 - ◇ Simplifying a fraction
 - ◇ Introduction to addition or subtraction of fractions with different denominators
 - ◇ Fraction multiplication
 - ◇ Fraction division
 - ◆ Algebraic Expressions (3 topics)

- ◇ Summation of indexed data
- ◇ Introduction to the product rule of exponents
- ◇ Power rules with positive exponents
- ◆ Descriptive Statistics (2 topics)
 - ◇ Making reasonable inferences based on proportion statistics
 - ◇ Population standard deviation
- ◆ Counting and Probability (8 topics)
 - ◇ Combinations
 - ◇ Permutations
 - ◇ Probability of independent events: Decimal answers
 - ◇ Probability of dependent events
 - ◇ Probabilities of draws with replacement
 - ◇ Word problem involving the probability of a union or an intersection
 - ◇ Conditional probability: Basic
 - ◇ Intersection and conditional probability

***Other Topics Available** *By default, these topics are NOT included in the course, but can be added using the content editor in the Teacher Module.*