



Yearly Overview

PAP Mathematics 7

2024-2025

The curriculum for PAP Mathematics 7 includes all Grade 8 TEKS and the remaining appropriately aligned Grade 7 TEKS that were not taught in PAP Mathematics 6. The PAP Mathematics 7 curriculum is a compacted and accelerated curriculum. Student expectations from Grade 8 TEKS taught in PAP Mathematics 7 include: extending previous knowledge of sets and subsets using a visual representation to describe relationships between sets of real numbers; approximate the value of an irrational number, including pi and square roots of numbers less than 225, and locate that rational number approximation on a number line; convert between standard decimal notation and scientific notation; order a set of real numbers arising from mathematical and real-world contexts; use similar right triangles to develop an understanding that slope, m , given as the rate comparing the change in y -values to the change in x -values, $(y_2 - y_1) / (x_2 - x_1)$, is the same for any two points (x_1, y_1) and (x_2, y_2) on the same line; graph proportional relationships, interpreting the unit rate as the slope of the line that models the relationship; use data from a table or graph to determine the rate of change or slope and y -intercept in mathematical and real-world problem; represent linear proportional situations and linear non-proportional situations from mathematical and real world situations with tables, graphs, and equations in the form of $y = kx$ or $y = mx + b$, where $b \neq 0$; model and solve one-variable equations with variables on both sides of the equal sign that represent mathematical and real-world problems using rational number coefficients and constants; understand the relationships about angles in triangles and angles created when parallel lines are cut by a transversal; personal finance problems involving cost of loans and credit cards; and estimate costs of two-year and four-year college education.

Semester 1

Term 1

- **Numbers and Operations**
 - Real Number Relationships, Order Real Numbers, Square Roots, and Scientific Notation
- **Expressions, Equations, and Relationships**
 - One-variable, Two-Step Equations and Inequalities with Variables on Both Sides
 - Solving, Writing, and Modeling
- **Proportionality**
 - Rates of Change and Slope
 - Graph Linear Proportional and Non-Proportional Relationships
 - Tables, Equations, and Graphs
 - Direct Variation
- **Solving Systems of Equations by Graphing**

District PAP Grade 7 Review and Benchmark

Term 2

- **Proportionality**
 - Linear Relationships Between Bivariate Sets of Data
 - Identify Functions
- **Measurement and Data**
 - Inferences and Comparing Populations
 - Scatterplots and Trend Lines
 - Determine Mean Absolute Deviation
- **Probability**
 - Simple and Compound Events for Experimental and Theoretical Probability
 - Qualitative and Quantitative Predictions
 - Sample Spaces and Tree Diagrams

District PAP Grade 7 Review and Semester Exam



Semester 2

Term 3

- **Two-Dimensional Shapes**
 - Transformations on a Coordinate Plane
 - Dilations
 - Translations
 - Rotations
 - Reflections
 - **Expressions, Equations, and Relationships**
 - Sum of the Angles of a Triangle
 - Parallel Lines Cut by a Transversal
 - Pythagorean Theorem
 - Volume of Rectangular and Triangular Prisms and Pyramids
 - Volume of Cylinders, Cones, and Spheres
 - Lateral and Total Surface Area of Prisms and Cylinders
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Term 4

- **Personal Financial Literacy**
 - Sales and Income Tax
 - Incentives, Sales Rebates, and Coupons
 - Personal Budgets and Savings
 - Simple and Compound Interest
 - Investments for College and Retirement
 - Calculate Cost of Repaying a Loan
 - Benefits of Financial Responsibility and Cost of Financial Irresponsibility
 - Estimate Cost of College

STAAR Review and Grade 8 STAAR Test

PAP Grade 7 Review and Semester Exam
