

Bridge Math Pacing Guide

Bridge Math is a course intended to build upon concepts taught in previous courses to allow students to gain a deeper knowledge of the real and complex number systems as well as the structure, use, and application of equations, expressions, and functions. Functions emphasized include linear, quadratic, and polynomial. Students continue mastery of geometric concepts such as similarity, congruence, right triangles, and circles. Students use categorical and quantitative data to model real life situations and rules of probability to compute probabilities of compound events.

Quarter 1

The Real Number System

- Use properties of rational and irrational numbers.

Quantities

- Reason quantitatively and use units to solve problems.

Seeing Structure in Expressions

- Write expressions in equivalent forms to solve problems.

Quarter 2

Arithmetic with Polynomials and Rational Expressions

- Perform arithmetic operations on polynomials.
- Understand the relationship between zeros and factors of polynomials.

Creating Equations

- Create equations that describe numbers or relationships.

Reasoning with Equations and Inequalities

- Understand solving equations as a process of reasoning and explain the reasoning.
- Solve equations and inequalities in one variable.

Geometric Measurement and Dimension

- Visualize relationships between two-dimensional and three-dimensional objects.

Quarter 3

Reasoning with Equations and Inequalities

- Represent and solve equations and inequalities graphically.

Interpreting Functions

- Understand the concept of a function and use function notation.
- Interpret functions that arise in applications in terms of the context.
- Analyze functions using different representations.

Similarity, Right Triangles, and Trigonometry

- Understand similarity in terms of similarity transformations.
- Define trigonometric ratios and solve problems involving right triangles.

Modeling with Geometry

- Apply geometric concepts in modeling situations.

Quarter 4

Interpreting Categorical and Quantitative Data

- Summarize, represent, and interpret data on a single count or measurement variable.
- Summarize, represent, and interpret data on two categorical and quantitative variables.
- Interpret linear models.

Conditional probability and the Rules of Probability

-Use the rules of probability to compute probabilities of compound events in a uniform probability model.