Grade 8

Math Excellence Program

$a^2 + b^2 =$

MATH
1 2 3
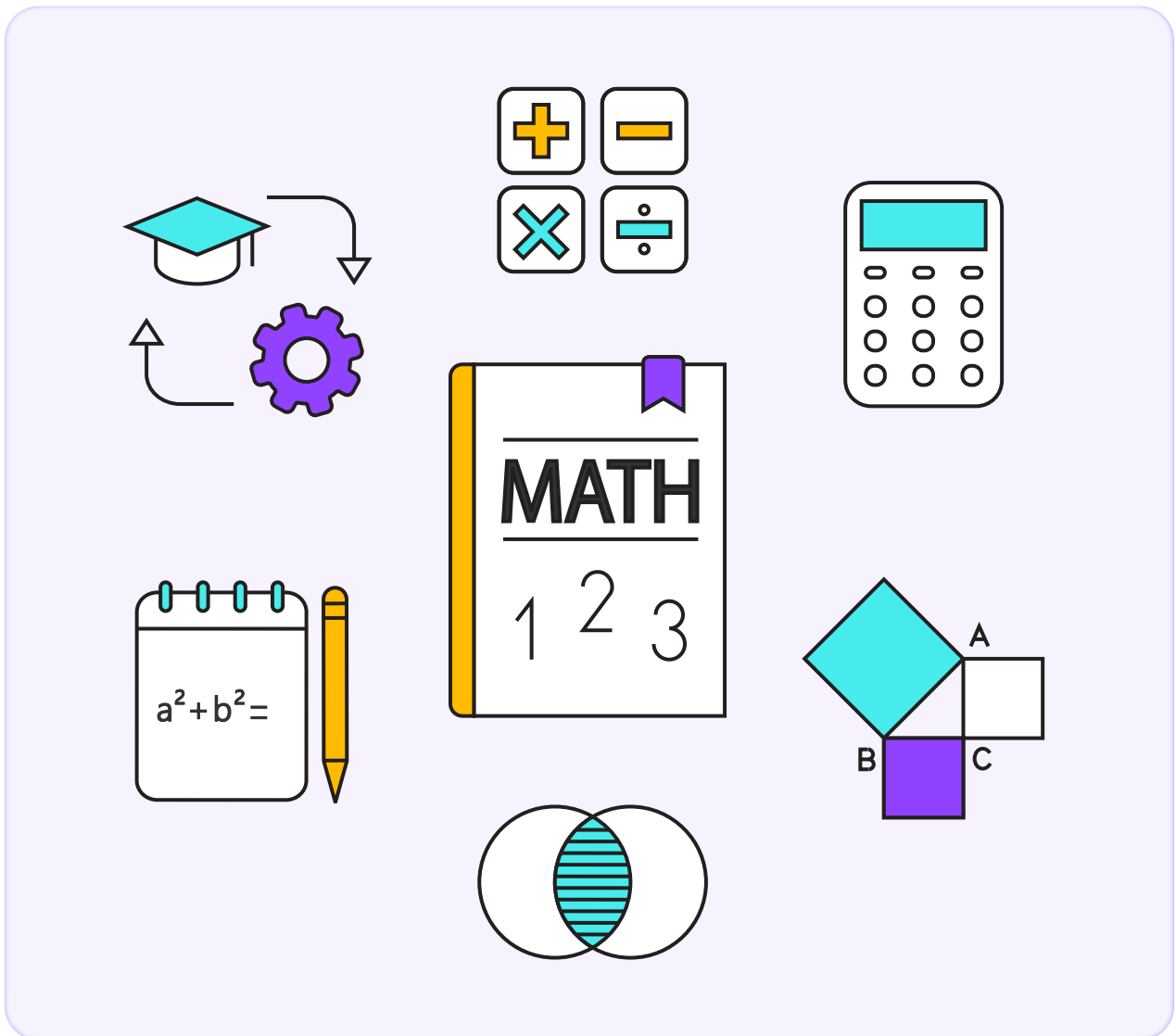
A
B C

Grade 8

Numbers and Operations: 40- 45 Classes

Students will learn correspondences between **expressions, verbal descriptions word problems** involving fractions, decimals, and percentages as well as using visual aids to enhance their understanding.They will learn to apply **properties of operations** as strategies to **multiply and divide rational numbers,solve real-world and mathematical problems** involving the four operations with rational numbers.They will learn to solve **multi-step real-life and mathematical problems** posed with **positive and negative rational numbers** in any form (whole numbers, fractions, and decimals), using tools strategically.
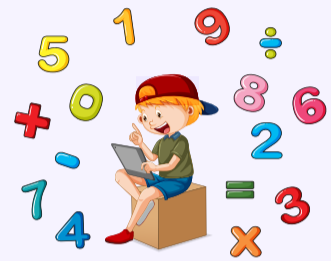
Algebra: 25-30 Classes

The students will not only learn how to **compute** them, and knowing and flexibly use different **properties of operations and objects**. They will also use **ratio and rate reasoning** to solve real-world and mathematical problems reasoning **by line diagrams, or equations** and also learn to apply operations on **algebraic equations**. The students will identify the variable(s) and the **highest power of the variable** in a given algebraic equation and distinguish whether it is a **linear equation** in one variable or not. They will **simplify the given linear equation in one variable** and solve them.

Mensuration: 5-10 Classes

The students will recognize volume as an attribute of solid figures and understand concepts of volume measurement. They will Illustrate **2-D representation** of a **cuboid, cube and cylinder** and compute the **surface areas** by breaking them into areas of known figures and learn to **calculate the surface area of various figures**.

CUBE

CYLINDER
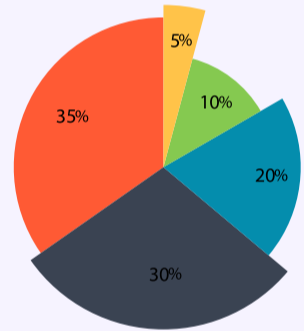
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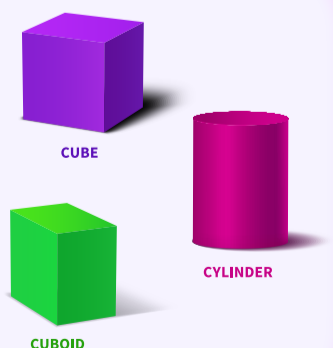
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Geometry: 10-15 Classes

Students will discuss the **elements in a map** and differentiate between **a map and a picture** read and **interpret simple maps** and answer questions based on them.

The students will learn the **properties of a parallelogram** in order to describe the **relationship between its opposite sides, angles, and diagonals**.

Data Handling: 10-15 Classes

Students learn about **data handling**, which involves collecting, organizing, analyzing, and interpreting collecting and organizing data using **tables and graphs such as bar graphs, line graphs, and pictographs** and will interpret data from tables and graphs.

They will understand trends on **line graphs and bar graphs and predict future data**, Students will also learn **comparison, sum, and difference problems** on it and how to analyze pie charts by considering what **percentage of the whole each segment represents**, and **interpret data in pie charts** to answer questions and learn with simple events, the **probability of outcomes** event occurs and identify the outcomes in the sample space.

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