

Unit 6: Expressions, Equations, and Inequalities

Family Resources for Math 7 Unit 6: Expression, Equations, and Inequalities

The Natural Beauty of Mathematics



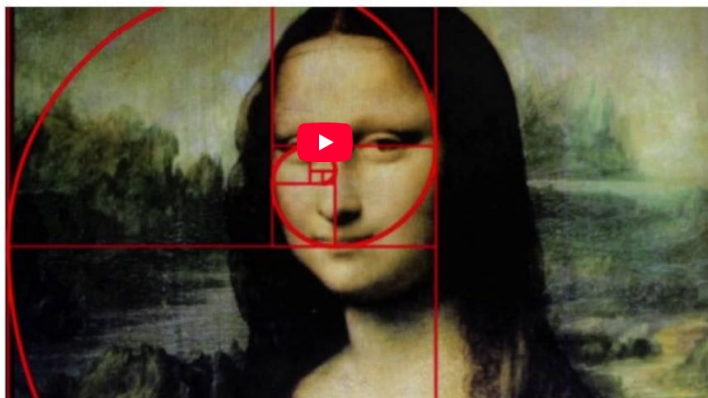
Mathematics is much more than numbers and formulas. It is a way of recognizing patterns, relationships, and structures that help us understand the world. From the symmetry of snowflakes and leaves to the spirals found in sunflowers, shells, and pinecones, mathematics reveals an underlying order and beauty throughout nature.



Math also inspires creativity in art, music, and design. Artists use geometric shapes, proportions, and patterns to create balance and harmony, while architects and engineers rely on mathematical principles to design buildings, bridges, and other structures that are both functional and beautiful. Many of the designs we admire are rooted in mathematical ideas.

When we view mathematics as a way of exploring and making sense of the world, it becomes more than a school subject. It becomes a lens for discovery, encouraging curiosity, creativity, and wonder. By noticing patterns, connections, and structure in everyday life, learners can develop a deeper appreciation for the beauty and power of mathematics.

The Mona Lisa



For additional information and resources to support at home, please visit the [Office of Mathematics website](#)

Big Ideas in Unit 6

Within this unit, students will learn these big ideas:

- Representing Situations of the Form and
- Solving Equations of the Form and Problems that Lead to Those Equations
- Inequalities
- Writing Equivalent Expressions

For more details about this unit, see [Unit 6 Family Resources](#).

Lesson Specific Resources

Use the links below to learn about the learning from each lesson.

Lesson Link
6.1 Relationships between Quantities
6.2 Reasoning about Contexts with Tape Diagrams
6.3 Reasoning about Equations with Tape Diagrams
6.4 Reasoning about Equations and Tape Diagrams (Part 1)
6.5 Reasoning about Equations and Tape Diagrams (Part 2)
6.6 Distinguishing between Two Types of Situations
6.7 Reasoning about Solving Equations (Part 1)
6.8 Reasoning about Solving Equations (Part 2)
6.9 Dealing with Negative Numbers
6.10 Different Options for Solving One Equation
6.11 Using Equations to Solve Problems
6.12 Solving Problems about Percent Increase or Decrease
6.13 Reintroducing inequalities
6.14 Finding Solutions to Inequalities in Context
6.15 Efficiently Solving inequalities
6.16 Interpreting inequalities
6.17 Modeling with inequalities
6.18 Subtraction in Equivalent Expressions
6.19 Expanding and Factoring
6.20 Combining Like Terms (Part 1)
6.21 Combining Like Terms (Part 2)
6.22 Applications of Expressions