

Grade 8 - Learning Progressions

Adopted 2021

5-12 Learning Progressions

Numerical Reasoning

Numbers (rational numbers and irrational numbers)

1. All rational numbers [8.LP5.1.1](#)
2. Scientific notation [8.LP5.1.2](#)
3. Numerical expressions with integer exponents [8.LP5.1.3](#)
4. Use appropriate counting strategies to approximate rational and irrational numbers (radicals) on a number line [8.LP5.1.4](#)

Computational Fluency

1. Operations with scientific notation [8.LP5.2.1](#)
2. Scientific notation in real situations seen in everyday life [8.LP5.2.2](#)
3. Expressions with integer exponents [8.LP5.2.3](#)

Comparisons

1. Rational and irrational numbers (radicals) [8.LP5.3.1](#)
2. Compare proportional relationships presented in different ways [8.LP5.3.2](#)

Patterning & Algebraic Reasoning

Patterns

1. Integer exponents [8.LP6.1.1](#)
2. Perfect squares and perfect cubes [8.LP6.1.2](#)

Expressions

1. Expressions with integer exponents [8.LP6.2.1](#)
2. Linear expressions [8.LP6.2.2](#)
3. Operations with algebraic expressions [8.LP6.2.3](#)

Variable Equations & Inequalities

1. Analyze and solve linear equations and inequalities [8.LP6.3.1](#)

Ratios & Rates

1. Interpret unit rate as the slope of a graph [8.LP6.4.1](#)

Graphing

1. Linear functions 8.LP6.6.1
2. Comparing linear and non-linear functions 8.LP6.6.2
3. Systems of linear equations (including parallel and perpendicular) 8.LP6.6.3
4. Linear inequalities 8.LP6.6.4
5. Analyze data distributions 8.LP6.6.5

Functional & Graphical Reasoning

Function Families

1. Linear functions 8.LP7.1.1
2. Line of best fit 8.LP7.1.2

Geometric & Spatial Reasoning

Shapes & Properties

1. Introduction to Pythagorean Theorem and the converse 8.LP8.1.1

Geometric Measurement

1. Pythagorean Theorem to determine distance between two points 8.LP8.2.1
2. Volume of cones, cylinders, and spheres 8.LP8.2.2