

LSS ALIGNMENT FOR GRADES 6-8 MATH

HELPING STUDENTS CATCH UP — AND MOVE AHEAD.

Louisiana Student Standards Alignment Overview

Cignition's middle school math program **aligns with the Louisiana Student Standards for Mathematics (LSSM).** Virtual lessons guide students from concrete models of ratios and proportional relationships to more abstract concepts in algebra, transformational geometry, and statistical inference. Instruction emphasizes conceptual understanding, mathematical reasoning, and real-world application, supporting deep engagement with grade-level standards across all key domains.

Louisiana STUDENT STANDARDS MATHEMATICS

On the next page, each instructional domain is clearly broken out, along with the relevant standard codes and brief descriptions that show how these standards are addressed in our tutoring sessions.

Following the standards overview, you'll find a link to a sample lesson, which provides a closer look at how these standards are brought to life in our virtual tutoring sessions.

Ratios & Proportional Relationships (RP)

- **6.RP.A.1–6.RP.A.3:** Define ratios & unit rates; apply them to conversion, percent, and equivalence.
- **7.RP.A.1–7.RP.A.3:** Compute constant of proportionality; solve percent problems, including tax, tips, and markdowns.

Functions (F)

- **8.F.A.1–8.F.B.5:** Define functions; compare linear/non-linear relationships; describe rate of change and initial value.

The Number System (NS)

- **6.NS.A.1–6.NS.C.8:** Divide fractions; place negative/positive numbers on the number line and coordinate plane; fluently compute with multi-digit decimals.
- **7.NS.A.1–7.NS.A.3:** Add, subtract, multiply, divide *all* rational numbers; solve real-life problems with signed numbers.
- **8.NS.A.1–8.NS.A.2:** Classify rational vs. irrational; convert repeating decimals; approximate square roots on a number line.

Expressions & Equations (EE)

- **6.EE.A.1–6.EE.C.9:** Write/evaluate numerical & algebraic expressions; solve one-step equations/inequalities; graph relationships on the coordinate plane.
- **7.EE.A.1–7.EE.B.4:** Use properties to manipulate expressions; solve two-step equations/inequalities; analyze proportional and non-proportional graphs.
- **8.EE.A.1–8.EE.C.8:** Apply exponent rules; express very large/small numbers in scientific notation; solve systems of two linear equations algebraically and graphically.

Geometry (G)

- **6.G.A.1–6.G.A.4:** Find area of triangles/polygons; surface area with nets; volume of right prisms.
- **7.G.A.1–7.G.B.6:** Solve scale-drawing problems; use the symbol π in formulas involving circles; analyze angle relationships; compute volume of prisms/pyramids.
- **8.G.A.1–8.G.C.9:** Perform rotations, reflections, translations, dilations; prove similarity; apply Pythagorean theorem to distance & midpoint.

Statistics & Probability (SP)

- **6.SP.A.1–6.SP.B.5:** Pose statistical questions; represent data in dot plots/histograms; summarize center & variability.
- **7.SP.A.1–7.SP.C.8:** Generate random samples; calculate theoretical & experimental probability; model compound events.
- **8.SP.A.1–8.SP.A.4:** Construct scatterplots; fit a trend line; interpret slope/intercept; analyze two-way tables for association.

Sample Lesson - Integer Operations