

Fourth Grade Mathematics Georgia Performance Standards

Numbers and Operations

M4N1 Students will further develop their understanding of how whole numbers are represented in the base-ten numeration system.

a. Identify place value names and places from hundredths through one million.

[Episode 207](#)

b. Equate a number's word name, its standard form, and its expanded form.

M4N2 Students will understand and apply the concept of rounding numbers.

a. Round numbers to the nearest ten, hundred, or thousand.

[Episode 207](#)

[Episode 209](#)

b. Describe situations in which rounding numbers would be appropriate and determine whether to round to the nearest ten, hundred, or thousand.

c. Understand the meaning of rounding a decimal to the nearest whole number.

d. Represent the results of computation as a rounded number when appropriate and estimate a sum or difference by rounding numbers.

M4N3 Students will solve problems involving multiplication of 2-3 digit numbers by 1-2 digit numbers.

[Episode 210](#)

[Episode 211](#)

[Episode 213](#)

[Episode 217](#)

[Episode 218](#)

M4N4 Students will further develop their understanding of division of whole numbers and divide in problem-solving situations without calculators.

[Episode 210](#)

a. Know the division facts with understanding and fluency.

b. Solve problems involving division by a 2-digit number (including those that generate a remainder).

c. Understand the relationship between dividend, divisor, quotient, and remainder.

d. Understand and explain the effect on the quotient of multiplying or dividing both the divisor and dividend by the same number ($2050 \div 50$ yields the same answer as $205 \div 5$).

[Episode 211](#)

M4N5 Students will further develop their understanding of the meaning of decimals and use them in computations.

a. Understand decimals are a part of the base-ten system.

b. Understand the relative size of numbers and order two digit decimals.

c. Add and subtract both one and two digit decimals.

[Episode 213](#)

d. Model multiplication and division of decimals by whole numbers.

e. Multiply and divide both one and two digit decimals by whole numbers.

M4N6 Students will further develop their understanding of the meaning of common fractions and use them in computations.

a. Understand representations of simple equivalent fractions.

[Episode 204](#)

[Episode 208](#)

b. Add and subtract fractions and mixed numbers with common denominators. (Denominators should not exceed twelve.)

[Episode 208](#)

[Episode 212](#)

[Episode 220](#)

c. Convert and use mixed numbers and improper fractions interchangeably.

M4N7 Students will explain and use properties of the four arithmetic operations to solve and check problems.

a. Describe situations in which the four operations may be used and the relationships among them.

[Episode 217](#)

[Episode 218](#)

b. Compute using the order of operations, including parentheses.

c. Compute using the commutative, associative, and distributive properties.

d. Use mental math and estimation strategies to compute.

Measurement

M4M1 Students will understand the concept of weight and how to measure weight.

- a. Use standard and metric units to measure the weight of objects.
- b. Know units used to measure weight (gram, kilogram, ounce, pound, and ton).
- c. Compare one unit to another within a single system of measurement.

M4M2 Students will understand the concept of angle and how to measure angles.

- a. Use tools, such as a protractor or angle ruler, and other methods, such as paper-folding or drawing a diagonal in a square, to measure angles.
- b. Understand the meaning and measure of a half rotation (180°) and a full rotation (360°).

Geometry

M4G1 Students will define and identify the characteristics of geometric figures through examination and construction.

- a. Examine and compare angles in order to classify and identify triangles by their angles.
- b. Describe parallel and perpendicular lines in plane geometric figures.

[Episode 215](#)

- c. Examine and classify quadrilaterals (including parallelograms, squares, rectangles, trapezoids, and rhombi).
- d. Compare and contrast the relationships among quadrilaterals.

M4G2 Students will understand fundamental solid figures.

- a. Compare and contrast a cube and a rectangular prism in terms of the number and shape of their faces, edges, and vertices.
- b. Describe parallel and perpendicular lines and planes in connection with rectangular prisms.
- c. Construct/collect models for solid geometric figures (cubes, prisms, cylinders, etc.)

M4G3 Students will use the coordinate system.

- a. Understand and apply ordered pairs in the first quadrant of the coordinate system.

[Episode 218](#)

b. Locate a point in the first quadrant in the coordinate plane and name the ordered pair.

c. Graph ordered pairs in the first quadrant.