Florida Mathematics (B.E.S.T.)

Grade 4: Access Points

Algebraic Reasoning

1 Represent and solve problems involving the four operations with whole numbers and fractions.

1. Solve one-step real-world problems involving multiplication and division of whole numbers. Multiplication may not exceed two-digit by one-digit and division must be related to one-digit by one-digit multiplication facts. MA.4.AR.1.AP.1
2. Solve one-step real-world problems involving addition and subtraction of fractions less than one with like denominators. Denominators limited to 2, 3, 4, 6, 8 or 10. MA.4.AR.1.AP.2
3. Solve one-step real-world problems involving multiplication of a unit fraction by a whole number (e.g., 3 × 1/4, 2 × 1/6, 5 × 1/2). Denominators limited to 2, 3, 4, 6, 8 or 10. MA.4.AR.1.AP.3

2 Demonstrate an understanding of equality and operations with whole numbers.

1. Determine whether an equation (with no more than three terms) involving any of the four operations with whole numbers is true or false. Sums may not exceed 100 and their related subtraction facts. Multiplication may not exceed two-digit by one-digit and division must be related to one-digit by one-digit multiplication facts. MA.4.AR.2.AP.1
2. Given a real-world context, identify or generate an equation involving multiplication or division to determine the unknown product or quotient. Multiplication may not exceed two-digit by one-digit and division must be related to one-digit by one-digit multiplication facts. MA.4.AR.2.AP.2

3 Recognize numerical patterns, including patterns that follow a given rule.

1. Explore factor pairs for a whole number. Factors may not exceed single-digit whole numbers. MA.4.AR.3.AP.1
2. Generate a numerical pattern when given a starting term and a one-step addition rule (e.g., starting at the number 5 use the rule add 5 and generate the pattern). MA.4.AR.3.AP.2

Data Analysis and Probability

1 Collect, represent and interpret data and find the mode, median and range of a data set.

1. Sort and represent numerical data, including fractional values using tables or line plots (when given a scaled number line). Data set to include only whole numbers and halves. MA.4.DP.1.AP.1

Skip to main content

2 Determine the mode or range to interpret numerical data including fractional values, represented with tables or line plots. Data set to include only whole numbers and halves. Limit the greatest and least number in a data set to a whole number. MA.4.DP.1.AP.2

3 Solve one-step real-world problems involving numerical data represented with tables or line plots. Data set to include only whole numbers and halves. Required operations to involve only the whole number data points in the data set. MA.4.DP.1.AP.3

Fractions

1 Develop an understanding of the relationship between different fractions and the relationship between fractions and decimals.

1 Using a visual model, recognize fractions less than one, with the denominator 10 as an equivalent fraction with the denominator 100 (e.g., 2/10 is equivalent to 20/100). MA.4.FR.1.AP.1

2 Use decimal notation to represent fractions less than one with denominators of 10 or 100 and use fractional notation with denominators of 10 or 100 to represent decimals less than one. MA.4.FR.1.AP.2

3 Using a visual model, generate fractions less than a whole that are equivalent to fractions with denominators 2, 3, 4, 6, 8 or 10. Explore how the numerator and denominator are affected when the equivalent fraction is created. MA.4.FR.1.AP.3

4a Explore mixed numbers and fractions greater than one. MA.4.FR.1.AP.4A

4b Using visual models, compare fractions less than one with different numerators and different denominators. Denominators limited to 2, 3, 4, 6, 8 or 10. MA.4.FR.1.AP.4B

2 Build a foundation of addition, subtraction and multiplication operations with fractions.

1 Decompose a fraction less than one into a sum of unit fractions with the same denominator (e.g., 3/4 = 1/4 + 1/4 + 1/4). Denominators limited to 2, 3, 4, 6, 8 or 10. Demonstrate each decomposition with objects, drawings or equations. MA.4.FR.2.AP.1

2 Explore adding and subtracting fractions less than one with like denominators. Denominators limited to 2, 3, 4, 6, 8 or 10. MA.4.FR.2.AP.2

3 Explore the addition of a fraction with denominator of 10 to a fraction with denominator of 100 using visual models to find equivalent fractions. MA.4.FR.2.AP.3

4 Explore the multiplication of a unit fraction by a whole number (e.g., 3 × 1/4, 2 × 1/6, 5 × 1/2). Denominators limited to 2, 3, 4, 6, 8 or 10. MA.4.FR.2.AP.4

Geometric Reasoning

1 Draw, classify and measure angles.

1 Informally explore angles as an attribute of two-dimensional figures. Limit angles to acute, obtuse and right. MA.4.GR.1.AP.1

Skip to main content

2 Using a tool with a square angle, identify angles as acute, right or obtuse and construct angles that are acute, right or obtuse. MA.4.GR.1.AP.2

3 Recognize that angle measure is additive by exploring when an angle is decomposed into two non-overlapping parts the angle measure of the whole is the sum of the angle measures of the parts. MA.4.GR.1.AP.3

2 Solve problems involving the perimeter and area of rectangles.

1 Solve perimeter and area mathematical and real-world problems for rectangles with given whole-number side lengths. MA.4.GR.2.AP.1

2 Explore the relationship between perimeter and area using rectangles with the same perimeter and different areas or with the same area and different perimeters. MA.4.GR.2.AP.2

Measurement

1 Measure the length of objects and solve problems involving measurement.

1a Select and use appropriate tools to measure length (i.e., inches, feet, yards), liquid volume (i.e., gallons, quarts, pints, cups) and temperature (i.e., degrees Fahrenheit). MA.4.M.1.AP.1A

1b Explore selecting and using appropriate tools to measure weight (i.e., ounces, pounds). MA.4.M.1.AP.1B

2a 1c. Explore relative sizes of measurement units within one system of units including yards, feet, inches; pounds, ounces; gallons, quarts, pints, cups; and hours, minutes. MA.4.M.1.AP.2A

2b 1d. Using a conversion sheet, convert from a larger to a smaller unit within a single system of measurement using the units: yards, feet, inches; pounds, ounces; gallons, quarts, pints, cups; and hours, minutes. Only whole number measurements may be used. MA.4.M.1.AP.2B

2 Solve problems involving time and money.

1a Solve one- and two-step real-world problems involving distances (i.e., inches, feet, yards, miles) in whole numbers using any combination of the four operations. MA.4.M.2.AP.1A

1b Solve one-step real-world problems involving intervals of time in whole numbers using any of the four operations. MA.4.M.2.AP.1B

2 Solve one- and two-step addition and subtraction real-world problems involving money using decimal notation. Sums not to exceed $0.99 and their related subtraction facts. MA.4.M.2.AP.2

Number Sense and Operations

1 Understand place value for multi-digit numbers.

1 Explore how the value of a digit in a multi-digit whole number changes if the digit moves one place to the left. MA.4.NSO.1.AP.1

2 Read and generate numbers from 0 to 10,000 using standard form and expanded form. MA.4.NSO.1.AP.2

3 Plot, order and compare multi-digit whole numbers up to 10,000. MA.4.NSO.1.AP.3

Skip to main content

4 Round whole numbers from 100 to 10,000 to the nearest 1,000 with visual support. MA.4.NSO.1.AP.4

5 Using visual models, compare decimals less than one up to the hundredths. MA.4.NSO.1.AP.5

---

2 Build an understanding of operations with multi-digit numbers including decimals.

1 Recall multiplication facts of one-digit whole numbers multiplied by 1, 2, 5 and 10. MA.4.NSO.2.AP.1

2 Explore multiplication of two whole numbers, up to two digits by one digit. MA.4.NSO.2.AP.2

3 Apply a strategy to multiply two whole numbers up to two digits by one digit. MA.4.NSO.2.AP.3

4 Explore division of two whole numbers up to two digits by one digit with and without remainders. Represent remainders as whole numbers. MA.4.NSO.2.AP.4

5 Explore the estimation of products and quotients of two whole numbers up to two digits by one digit. MA.4.NSO.2.AP.5

6 Identify the number that is one-tenth more and one-tenth less than a given number (i.e., 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9). MA.4.NSO.2.AP.6

7 Explore the addition and subtraction of decimals less than one to the tenths (e.g., 0.3 + 0.5) and hundredths (e.g., 0.25 − 0.12). MA.4.NSO.2.AP.7