



# Idaho Alternate Assessment Math Blueprint

Grade 4

## IDAA MATH ITEM DISTRIBUTION ACROSS STRANDS: 40 ITEMS

Strand	Minimum Items	Maximum Items	% of Items Per Strand
Data Analysis, Probability, & Statistics	5	7	13-18%
Geometry	5	7	13-18%
Measurement	5	7	13-18%
Number and Operations	14	17	35-43%
Patterns, Relations, & Functions	3	5	8-13%
Symbolic Expression	2	4	5-10%

## DATA ANALYSIS, PROBABILITY, & STATISTICS ITEMS ACROSS STANDARDS: 5 TO 7 ITEMS

Data Analysis, Probability, and Statistics	Minimum Items	Maximum Items
4.DPS.1g3: Collecting data, organize in graph	0	2
4.DPS.1i1: Select the appropriate statement that describes the data representations based on given data.	0	2
4.DSP.1j1: Select an appropriate statement that describes the most frequent or the least frequent data point using a line plot, picture graph, or bar graph	0	2
4.DPS.1k2: Apply results of data to a real-world situation	0	2

## GEOMETRY ITEMS ACROSS STANDARDS: 5 TO 7 ITEMS

Geometry	Minimum Items	Maximum Items
4.GM.1h2: Classify two-dimensional shapes based on attributes (# of angles)	0	2
4.GM.1j1: Recognize a point, line and line segment, rays in two-dimensional figures	0	1
4.GM.1j2: Recognize perpendicular and parallel lines in two-dimensional figures	0	1
4.GM.1j3: Recognize an angle in two-dimensional figures	0	1
4.GM.1j4: Categorize angles as right, acute, or obtuse	0	1
4.GM.1k1: Recognize a line of symmetry in a figure	0	2

## MEASUREMENT ACROSS STANDARDS: 5 TO 7 ITEMS

Measurement	Minimum Items	Maximum Items
4.ME.1d3: Use tiling and multiplication to determine area	0	1
4.ME.1g2: Solve word problems using perimeter and area where changes occur to the dimensions of a rectilinear figure	0	1
4.ME.2e4: Select appropriate tool for measurement: mass, length, angles	0	1

Measurement	Minimum Items	Maximum Items
4.ME.2e5: Construct a given angle	0	1
4.ME.2e6: Measure right angles using a tool (e.g., angle ruler, protractor)	0	1
4.ME.2f1: Complete a conversion table for length and mass within a single system	0	1
4.ME.2g1: Determine whether a situation calls for a precise measurement or an estimation (distance, volume, mass, time, money)	0	1
4.ME.2h1: Apply the formulas for area and perimeter to solve real world problems	0	1

## NUMBER AND OPERATIONS ACROSS STANDARDS: 14 TO 17 ITEMS

Number and Operations	Minimum Items	Maximum Items
4.NO.1j5: Use place value to round to any place (i.e., ones, tens, hundreds, thousands)	0	2
4.NO.1j6: Compare multi-digit numbers using representations and numbers	0	1
4.NO.1j7: Write or select the expanded form for a multi-digit number	0	1
4.NO.1k1: Compare the value of a number when it is represented in different place values of two 3 digit numbers	0	1
4.NO.1l6: Locate fractions on a number line	0	1
4.NO.1l7: Order fractions on a number line	0	1
4.NO.1m1: Determine equivalent fractions	0	1
4.NO.1n1: Select a model of a given fraction (halves, thirds, fourths, sixths, eighths)	0	1
4.NO.1n2: Compare up to 2 given fractions that have different denominators	0	1
4.NO.1o1: Match a fraction with a denominator of 10 or 100 as a decimal ( $5/10 = .5$ )	0	1
4.NO.1o2: Find the equivalent decimal for a given fraction	0	1
4.NO.1p1: Read, write or select decimals to the tenths place	0	1
4.NO.1p2: Read, write or select decimals to the hundredths place	0	1
4.NO.1q1: Compare two decimals to the tenths place with a value of less than 1	0	1
4.NO.1q2: Compare two decimals to the hundredths place with a value of less than 1	0	1
4.NO.2c2: Solve multi digit addition and subtraction problems up to 1000	0	1
4.NO.2d6: Find total number inside an array with neither number in the columns or rows larger than 10	0	1
4.NO.2d7: Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 10	0	1
4.NO.2d8: Match an accurate addition and multiplication equation to a representation	0	1
4.NO.2e2: Solve or solve and check one or two step word problems requiring addition, subtraction or multiplication with answers up to 100	0	1
4.NO.2f1: Identify multiples for a whole number (e.g., $2 = 2, 4, 6, 8, 10$ )	0	1

Number and Operations	Minimum Items	Maximum Items
4.NO.2f2: Solve multiplication problems up to two digits by one digit	0	1
4.NO.2g1: Using a representation, decompose a fraction into multiple copies of a unit fraction (e.g., $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ )	0	1
4.NO.2h1: Add and subtract fractions with like denominators of (2, 3, 4, or 8)	0	1
4.NO.2h2: Add and subtract fractions with like denominators (2, 3, 4, or 8) using representations	0	1
4.NO.2h3: Solve word problems involving addition and subtraction of fractions with like denominators (2, 3, 4, or 8)	0	1

### PATTERNS, RELATIONS, AND FUNCTIONS ACROSS STANDARDS: 3 TO 5 ITEMS

Patterns, Relations, and Functions	Minimum Items	Maximum Items
4.PRF.1d2: Use objects to model multiplication and division situations involving up to 10 groups with up to 5 objects in each group and interpret the results	0	1
4.PRF.1e3: Solve multiplicative comparisons with an unknown using up to 2-digit numbers with information presented in a graph or word problem (e.g., an orange hat cost \$3. A purple hat cost 2 times as much. How much does the purple hat cost? [ $3 \times 2 = p$ ])	0	1
4.PRF.1f3: Apply the distributive property to solve problems with models	0	1
4.PRF.1f4: Solve a 2-digit by 1-digit multiplication problem using 2 different strategies	0	1
4.PRF.2d3: Generate a pattern when given a rule and word problem (I run 3 miles every day, how many miles have I run in 3 days)	0	1
4.PRF.2e1: Extend a numerical pattern when the rule is provided	0	1

### SYMBOLIC EXPRESSION ACROSS STANDARDS: 2 TO 4 ITEMS

Symbolic Expression	Minimum Items	Maximum Items
4.SE.1g2: Use =, <, or > to compare 2 fractions (fractions with a denominator of 10 or less)	0	1
4.SE.1g3: Use =, <, or > to compare 2 decimals (decimals in multiples of .10)	0	1
4.SE.1h1: Express whole numbers as fractions	0	1
4.SE.1h2: Identify the equivalent decimal for a fraction	0	1