



# Idaho Alternate Assessment Math Blueprint

Grade 8

## IDAA MATH ITEM DISTRIBUTION ACROSS STRANDS: 40 ITEMS

Strand	Minimum Items	Maximum Items	% of Items Per Strand
Data Analysis, Probability, & Statistics	11	13	28-33%
Geometry	6	8	15-20%
Measurement	3	5	8-13%
Number and Operations	6	8	15-20%
Patterns, Relations, & Functions	8	10	20-25%
Symbolic Expression	1	2	3-5%

## DATA ANALYSIS, PROBABILITY, & STATISTICS ITEMS ACROSS STANDARDS: 11 TO 13 ITEMS

Data Analysis, Probability, and Statistics	Minimum Items	Maximum Items
8.DPS.1f3: Construct a two-way table summarizing data on two categorical variables collected from the same subjects; identify possible association between the two variables	0	2
8.DPS.1g2: Graph continuous data using line graphs, histograms, or box plots	0	2
8.DPS.1h1: Graph bivariate data using scatter plots and identify possible associations between the variables	0	2
8.DPS.1i3: Using box plots and scatter plots, identify data points that appear to be outliers	0	1
8.DPS.1i4: Identify outliers, range, mean, median, and mode	0	1
8.DPS.1j2: Make or select an appropriate statement based upon two unequal data sets using measure of central tendency and shape	0	2
8.DPS.1k2: Analyze displays of bivariate data to develop or select appropriate claims about those data	0	2
8.DPS.2e4: Determine the theoretical probability of multistage probability experiments	0	1
8.DPS.2e5: Collect data from multistage probability experiments	0	1
8.DPS.2e6: Compare actual results of multistage experiment with theoretical probabilities	0	1
8.DPS.2g1: Distinguish between a linear and non-linear association when analyzing bivariate data on a scatter plot	0	1
8.DPS.2g2: Interpret the slope and the y-intercept of a line in the context of a problem	0	1

## GEOMETRY ITEMS ACROSS STANDARDS: 6 TO 8 ITEMS

Geometry	Minimum Items	Maximum Items
8.GM.1f1: Recognize a rotation, reflection, or translation of a figure	0	1
8.GM.1f2: Identify a rotation, reflection, or translation of a plane figure when given coordinates	0	1
8.GM.1g1: Recognize congruent and similar figures	0	2
8.GM.1i1: Identify supplementary angles	0	1
8.GM.1i2: Identify complimentary angles	0	1
8.GM.1i3: Identify adjacent angles	0	1
8.GM.1i4: Use angle relationships to find the value of a missing angle	0	1
8.GM.1j1: Find the hypotenuse of a two-dimensional right triangle	0	1
8.GM.1j2: Find the missing side lengths of a two-dimensional right triangle	0	1

## MEASUREMENT ACROSS STANDARDS: 3 TO 5 ITEMS

Measurement	Minimum Items	Maximum Items
8.ME.1e1: Describe the changes in surface area, area, and volume when the figure is changed in some way	0	1
8.ME.1e2: Compare area and volume of similar figures	0	1
8.ME.2d2: Apply the formula to find the volume of 3-dimensional shapes	0	2
8.ME.2f1: Apply the Pythagorean Theorem to determine lengths/distances in real-world situations	0	2

## NUMBER AND OPERATIONS ACROSS STANDARDS: 6 TO 8 ITEMS

Number and Operations	Minimum Items	Maximum Items
8.NO.1i1: Convert a number expressed in scientific notation up to 10,000	0	2
8.NO.1j1: Perform operations with numbers expressed in scientific notation	0	2
8.NO.1k1: Identify $\pi$ as an irrational number	0	1
8.NO.1k2: Round irrational numbers to the hundredths place	0	1
8.NO.1k3: Use approximations of irrational numbers to locate them on a number line	0	1
8.NO.2i3: Solve one step addition, subtraction, multiplication, division problems with fractions, decimals, and positive/negative numbers	0	1
8.NO.2i4: Solve two step addition, subtraction, multiplication, and division problems with fractions, decimals, or positive/negative numbers	0	1

## PATTERNS, RELATIONS, AND FUNCTIONS ACROSS STANDARDS: 8 TO 10 ITEMS

Patterns, Relations, and Functions	Minimum Items	Maximum Items
8.PRF.1e2: Represent proportional relationships on a line graph	0	2
8.PRF.1f1: Describe or select the relationship between the two quantities given a line graph of a situation	0	2

<b>Patterns, Relations, and Functions</b>	<b>Minimum Items</b>	<b>Maximum Items</b>
8.PRF.1g3: Solve linear equations with 1 variable	0	1
8.PRF.1g4: Solve systems of two linear equations in two variables and graph the results	0	1
8.PRF.1g5: Solve real world and mathematical problems leading to two linear equations in two variables	0	1
8.PRF.2c1: Given two graphs, describe the function as linear and not linear	0	2
8.PRF.2e2: Identify the rate of change (slope) and initial value (y-intercept) from graphs	0	1
8.PRF.2e3: Given a verbal description of a situation, create or identify a graph to model the situation	0	1
8.PRF.2e4: Given a graph of a situation, generate a description of the situation	0	1
8.PRF.2e5: Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions)	0	1

### **SYMBOLIC EXPRESSION ACROSS STANDARDS: 1 TO 2 ITEMS**

<b>Symbolic Expression</b>	<b>Minimum Items</b>	<b>Maximum Items</b>
8.SE.1f5: Use properties of integer exponents to produce equivalent expressions	1	2