



Idaho Alternate Assessment Math Blueprint

Grade 7

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	4	6	10-15%
Measurement	5	7	13-18%
Number and Operations	9	11	23-28%
Patterns, Relations, & Functions	4	6	10-15%
Symbolic Expression	2	3	5-8%

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

Data Analysis, Probability, and Statistics	Minimum Items	Maximum Items
7.DPS.1b1: Determine sample size to answer a given question	0	2
7.DPS.1g1: Graph continuous data using line graphs, histograms, or dot plots	0	2
7.DPS.1i1: Solve for the median of a given data set	0	1
7.DPS.1i2: Identify the range, median, mean, or mode of a given data set	0	1
7.DPS.1j1: Make or select a statement to compare the distribution of 2 data sets	0	2
7.DPS.1k1: Analyze graphs to determine or select appropriate comparative inferences about two samples or populations	0	2
7.DPS.2d1: Describe the probability of events as being certain or impossible, likely, less likely or equally likely	0	1
7.DPS.2d2: State the theoretical probability of events occurring in terms of ratios	0	1
7.DPS.2d4: Make a prediction regarding the probability of an event occurring; conduct simple probability experiments	0	1
7.DPS.2d5: Compare actual results of simple experiment with theoretical probabilities	0	1
7.DPS.2e1: Determine the theoretical probability of multistage probability experiments	0	1
7.DPS.2e2: Collect data from multistage probability experiments	0	1
7.DPS.2e3: Compare actual results of multistage experiment with theoretical probabilities	0	1

GEOMETRY ITEMS ACROSS STANDARDS: 4 TO 6 ITEMS

Geometry	Minimum Items	Maximum Items
7.GM.1e1: Construct or draw plane figures using properties	0	2

Geometry	Minimum Items	Maximum Items
7.GM.1h1: Add the area of each face of a prism to find surface area of three-dimensional objects	0	1
7.GM.1h2: Find the surface area of three-dimensional figures using nets of rectangles or triangles	0	1
7.GM.1h3: Find area of plane figures and surface area of solid figures (quadrilaterals)	0	1
7.GM.1h4: Find area of an equilateral, isosceles, and scalene triangle	0	1
7.GM.1h5: Describe the two-dimensional figures that result from a decomposed three-dimensional figure	0	1

MEASUREMENT ACROSS STANDARDS: 5 TO 7 ITEMS

Measurement	Minimum Items	Maximum Items
7.ME.1d1: Solve problems that use proportional reasoning with ratios of length and area	0	2
7.ME.2c1: Solve one step real world measurement problems involving area, volume, or surface area of two- and three-dimensional objects	0	2
7.ME.2d1: Apply formula to measure area and circumference of circles	0	2
7.ME.2e1: Solve one step real world problems related to scaling	0	1
7.ME.2e2: Solve one step problems involving unit rates associated with ratios of fractions	0	1

NUMBER AND OPERATIONS ACROSS STANDARDS: 9 TO 11 ITEMS

Number and Operations	Minimum Items	Maximum Items
7.NO.1g1: Identify the additive inverse of a number	0	1
7.NO.1g2: Identify the difference between two given numbers on a number line using absolute value	0	1
7.NO.1h1: Identify an equivalent fraction, decimal and percent when given one of the three numbers	0	2
7.NO.2f1: Identify the proportional relationship between two quantities	0	1
7.NO.2f2: Determine if two quantities are in a proportional relationship using a table of equivalent ratios or points graphed on a coordinate plane	0	1
7.NO.2f3: Find unit rates given a ratio	0	1
7.NO.2f4: Use a rate of change or proportional relationship to determine the points on a coordinate plane	0	1
7.NO.2f5: Use proportions to solve ratio problems	0	1
7.NO.2f6: Solve word problems involving ratios	0	1
7.NO.2h1: Find percentage in real world contexts	0	1
7.NO.2h2: Solve one step percentage increase and decrease problems	0	1
7.NO.2i1: Solve multiplication problems with positive/negative numbers	0	1
7.NO.2i2: Solve word problems involving the addition, subtraction, multiplication or division of fractions	0	1

PATTERNS, RELATIONS, AND FUNCTIONS ACROSS STANDARDS: 4 TO 6 ITEMS

Patterns, Relations, and Functions	Minimum Items	Maximum Items
7.PRF.1e1: Determine unit rates associated with ratios of lengths, areas, and other quantities measured in like units	0	1
7.PRF.1e2: Represent proportional relationships on a line graph	0	1
7.PRF.1f1: Use proportional relationships to solve multistep percent problems in real world situations	0	1
7.PRF.1g1: Solve real world multi step problems using whole numbers	0	1
7.PRF.1g2: Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities	0	1
7.PRF.2a5: Use variables to represent two quantities in a real-world problem that change in relationship to one another	0	1
7.PRF.2d1: Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p , q , and r are specific rational numbers	0	1

SYMBOLIC EXPRESSION ACROSS STANDARDS: 2 TO 3 ITEMS

Symbolic Expression	Minimum Items	Maximum Items
7.SE.1f1: Set up equations with 1 variable based on real world problems	0	1
7.SE.1f2: Solve equations with 1 variable based on real world problems	0	1
7.SE.1f3: Add and subtract linear expressions	0	1
7.SE.1f4: Factor and expand linear expressions	0	1