

WVGSA Grade 6 Mathematics Blueprint



Mathematics Item Blueprint

Table 1. Grade 6 Mathematics Blueprint by Domain and Cluster

Non-Calculator Section

Domain	Cluster	Min Items	Max Items
Ratios and Proportional Relationships (RP) & Number System (NS)	Ratios and Proportional Relationships & Number System (Total)	13	16
RP & NS	Understand ratio concepts and use ratio reasoning to solve problems.	3	8
RP & NS	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.	0	2
RP & NS	Compute fluently with multi-digit numbers and find common factors and multiples.	0	4
RP & NS	Apply and extend previous understandings of numbers to the system of rational numbers.	0	4
Expressions and Equations (EE)	Expressions and Equations (Total)	10	13
EE	Apply and extend previous understandings of arithmetic to algebraic expressions.	1	7
EE	Reason about and solve one-variable- equations and inequalities.	1	7
EE	Represent and analyze quantitative relationships between dependent and independent variables.	0	2

Calculator Section

Domain	Cluster	Min Items	Max Items
Geometry (G) & Statistics and Probability (SP)	Geometry & Statistics and Probability (Total)	8	8
G & SP	Solve real-world- and mathematical problems involving area, surface area, and volume.	1	6
G & SP	Develop understanding of statistical variability.	0	4
G & SP	Summarize and describe distributions.	0	3

Depth of Knowledge (DOK) Ranges

Table 2. DOK Item Distribution

DOK Level	Min Items	Max Items
DOK 1	5	9
DOK 2	17	22
DOK 3	5	9

Mathematical Habits of Mind (MHM) Subscores

Table 3. MHM Item Distribution

MHM Category	Min Items	Max Items
Modeling and Problem Solving	8	15
Use Mathematical Reasoning	8	11