

# WVGSA Grade 7 Mathematics Blueprint



## Calculator Section Blueprint

Table 1. Grade 7 Mathematics Blueprint by Domain and Cluster

Domain	Cluster	Min Items	Max Items
<b>Ratios and Proportional Relationships (RP) &amp; Number System (NS)</b>	Ratios and Proportional Relationships & Number System	8	10
<b>RP &amp; NS</b>	Analyze proportional relationships and use them to solve real--world and mathematical problems.	2	6
<b>RP &amp; NS</b>	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	2	6
<b>Expressions and Equations (EE)</b>	Expressions and Equations	8	10
<b>EE</b>	Use properties of operations to generate equivalent expressions.	2	6
<b>EE</b>	Solve real-life- and mathematical problems using numerical and algebraic expressions and equations.	2	6
<b>Geometry (G)</b>	Geometry	8	10
<b>G</b>	Draw, construct, and describe geometrical figures and describe the relationships between them.	2	6
<b>G</b>	Solve real-life- and mathematical problems involving angle measure, area, surface area, and volume.	2	6
<b>Statistics and Probability (SP)</b>	Statistics and Probability	8	10
<b>SP</b>	Use random sampling to draw inferences about a population.	0	3
<b>SP</b>	Draw informal comparative inferences about two populations.	0	3
<b>SP</b>	Investigate chance processes and develop, use, and evaluate probability models.	2	6

## Depth of Knowledge (DOK) Ranges

Table 2. DOK Item Distribution

<b>DOK Level</b>	<b>Min Items</b>	<b>Max Items</b>
<b>DOK 1</b>	5	9
<b>DOK 2</b>	17	22
<b>DOK 3</b>	5	9

## Mathematical Habits of Mind (MHM) Subscores

Table 3. MHM Item Distribution

<b>MHM Category</b>	<b>Min Items</b>	<b>Max Items</b>
<b>Modeling and Problem Solving</b>	10	14
<b>Use Mathematical Reasoning</b>	9	12