Mathematics Blueprint
WVGSA Grade 8

WVGSA Blueprint - Grade 8		
Domain	**Number of Items**	
Cluster	**Min**	**Max**
Calculator Total		
Expressions and Equations & Number System	**12**	**16**
EE & NS — Know that there are numbers that are not rational, and approximate them by rational numbers	0	2
Work with radicals and integer exponents	1	5
Understand connections between proportional relationships, lines, and linear equations	1	5
Analyze and solve linear equations and pairs of simultaneous linear equations	1	5
Functions	**10**	**12**
F — Define, evaluate, and compare functions	3	7
Use functions to model relationships between quantities	3	7
Geometry & Statistics and Probability	**16**	**20**
G & SP — Understand congruence and similarity using physical models, transparencies, or geometry software	2	7
Understand and apply the Pythagorean Theorem	1	5
Solve real-world problems involving volume cylinders, cones, and spheres.	0	2
Investigate patterns of association in bivariate data	2	7

DOK Ranges	Min	Max
DOK 1	7	11
DOK 2	22	27
DOK 3	6	11

Mathematical Habits of Mind Sub-Score	Min	Max
MHM: Modeling and Problem Solving	9	12
MHM: Use Mathematical Reasoning	8	11