Test Name	What This Test Measures	Form Name	Number of Items
Benchmark Module: Math SM1 – Algebra	This test measures the student's ability to solve systems of equations, represent and solve equations and inequalities graphically, create equations that describe numbers or relationships, and solve equations and inequalities in one variable.	A	10
		B	11
		C	12
Benchmark Module: Math SM1 – Geometry	This test measures the student's ability to experiment with transformations in the plane, use coordinates to prove simple geometric theorems algebraically, make geometric constructions, and understand congruence in terms of rigid motions.	A	10
		B	10
		C	9
Benchmark Module: Math SM1 – Number Quantity/Functions/ Statistics and Probability	This test measures the student's ability to construct and compare linear, quadratic, and exponential models and solve problems; interpret functions that arise in applications in terms of the context; build a function that models a relationship between two quantities; analyze functions using different representations; reason quantitatively and use units to solve problems; understand the concept of a function and use function notation; and summarize, represent, and interpret data on a single count or measurement variable.	A	24
		B	23

The table is designed to provide information about the content of each benchmark modular assessment **by grade and subject.** In the above table, you will find the name of the benchmark module, a brief description of the skills the module assesses, the names of each test form (e.g., A, B, C, etc.), and the number of test items on each form.

Test Name	What This Test Measures	Form Name	Number of Items
Benchmark Module: Math SM2 – Functions	This test measures the student's ability to prove and apply trigonometric identities, interpret functions that arise in applications in terms of the context, build a function that models a relationship between two quantities, and analyze functions using different representations.	A	10
		B	10
Benchmark Module: Math SM2 – Geometry	This test measures the student's ability to understand and apply theorems about circles, prove geometric theorems, prove theorems involving similarity, and explain volume formulas and use them to solve problems.	A	12
		B	12
Benchmark Module: Math SM2 – Number & Quantity/Algebra	This test measures the student's ability to create equations that describe numbers or relationships, solve equations and inequalities in one variable, interpret the structure of expressions, use complex numbers in polynomial identities and equations, perform arithmetic operations on polynomials, extend the properties of exponents to rational exponents, and perform arithmetic operations with complex numbers.	A	20
		B	20
Benchmark Module: Math SM2 – Statistics & Probability	This test measures the student's ability to understand independence and conditional probability and use them to interpret data, use probability to evaluate outcomes of decisions, and use the rules of probability to compute probabilities of compound events in a uniform probability model.	A	9
		B	9

The table is designed to provide information about the content of each benchmark modular assessment **by grade and subject.** In the above table, you will find the name of the benchmark module, a brief description of the skills the module assesses, the names of each test form (e.g., A, B, C, etc.), and the number of test items on each form.

Test Name	What This Test Measures	Form Name	Number of Items
Benchmark Module: Math SM3 – Functions	This test measures the student's ability to construct and compare linear, quadratic, and exponential models and solve problems; interpret functions that arise in applications in terms of the context; build a function that models a relationship between two quantities; and analyze functions using different representations.	A	11
		B	11
		C	11
Benchmark Module: Math SM3 – Numbers & Quantity/Algebra	This test measures the student's ability to create equations that describe numbers or relationships, interpret the structure of expressions, use complex numbers in polynomial identities and equations, perform arithmetic operations on polynomials, use polynomial identities to solve problems, rewrite rational expressions, and understand solving equations as a process of reasoning and explain the reasoning.	A	14
		B	14
		C	14
Benchmark Module: Math SM3 – Statistics & Probability	This test measures the student's ability to summarize, represent, and interpret data on a single count or measurement variable; understand and evaluate random processes underlying statistical experiments; and make inferences and justify conclusions from sample surveys, experiments, and observational studies.	A	9
Benchmark Module: Math SM3 – Trigonomic Functions/Geometry	This test measures the student's ability to extend the domain of trigonometric functions using the unit circle, apply geometric concepts in modeling situations, visualize relationships between two-dimensional and three-dimensional objects, and model periodic phenomena with trigonometric functions.	A	10
		B	11

The table is designed to provide information about the content of each benchmark modular assessment **by grade and subject.** In the above table, you will find the name of the benchmark module, a brief description of the skills the module assesses, the names of each test form (e.g., A, B, C, etc.), and the number of test items on each form.

Please Note: There are no Gr. 11 WY-TOPP Interim or Summative Assessments

2018+ WY-TOPP Interim Assessment Mathematics Blueprint

Secondary Levels – Grades 6-10

WY-TOPP

WYOMING DEPARTMENT OF EDUCATION

edu.wyoming.gov/blueprints

Grade 6 Math Interim Blueprint	# of Items by Domain	% of Items by Domain
Ratios and Proportional Relationships	5-7	16-22%
The Number System	6-8	19-25%
Expressions and Equations	7-11	22-34%
Non-Calculator Total	23	72%
Geometry	4-6	13-19%
Statistics and Probability	4-5	13-16%
Calculator Total	9	28%

Note: Grade 6 is the only grade to have a non-calculator and a calculator section on the WY-TOPP Interim and the Summative Assessments. Items in the non-calculator section are those that are assessing the student's ability to fluently compute and/or apply and extend previous understandings of arithmetic in order to solve algebraic expressions. A DESMOS Calculator will be available on the Grades 6-10 WY-TOPP Assessments. Students will have a calculator available for all items in Grades 7-10.

Grade 7 Math Interim Blueprint	# of Items by Domain	% of Items by Domain
Ratios and Proportional Relationships	6-8	18-24%
The Number System	6-8	18-24%
Expressions and Equations	8-9	24-26%
Geometry	6-8	18-24%
Statistics and Probability	4-6	12-18%
Total	34	100%

Grade 8 Math Interim Blueprint	# of Items by Domain	% of Items by Domain
Expressions and Equations	8-10	24-29%
Functions	8-12	24-35%
Geometry	8-12	24-35%
Statistics and Probability	6-7	18-21%
Total	34	100%

Grade 9 Math Interim Blueprint	# of Items by Domain	% of Items by Domain
Numbers and Quantities	4-6	16-24%
Algebra	8-10	32-40%
Functions	8-10	32-40%
Geometry	2-4	8-16%
Total	25	100%

Grade 10 Math Interim Blueprint	# of Items by Domain	% of Items by Domain
Congruence	8-10	32-40%
Similarity, Right Triangles, Trigonometry, & Circles	4-6	16-24%
Expressing Geometric Properties with Equations	5-7	20-28%
Geometric Measurement and Dimension/ Modeling	5-7	20-28%
Total	25	100%

WYOMING DEPARTMENT OF EDUCATION

WY-TOPP

DOK	Min. - Max.	%
1	6-10	15%-25%
2	20-26	50%-65%
3	6-10	15%-25%

DOK = Depth of Knowledge

edu.wyoming.gov/blueprints

KEY

Domain - Reporting Category
Benchmarks & Standard

9th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint	
Numbers and Quantities 6-8 Items; 15-20%]	
	The Real Number System [8 Items Max]
N.RN.1-2	A. Extend the properties of exponents to rational exponents.
N.RN.3	B. Use properties of rational and irrational numbers.
Algebra [12-15 Items; 30-38%]	
	Seeing Structure and Expressions [9 Items Max]
A.SSE.1	A. Interpret the structure of expressions.
A.SSE.3	B. Write expressions in equivalent forms to solve problems.
	Creating Equations [2 Items Max]
A.CED.1	G. Create equations that describe numbers or relationships.
	Reasoning with Equations and Inequalities [9 Items Max]
A.REI.1	H. Understand solving equations as a process of reasoning and explain the reasoning.
A.REI.3	I. Solve equations and inequalities in one variable.
A.REI.5-6	J. Solve systems of equations.
Functions [13-16 Items; 33-40%]	
	Interpreting Functions [12 Items Max]
F.IF.1-3	A. Understand the concept of a function and use function notation.
F.IF.4-6	B. Interpret functions that arise in applications in terms of the context.
F.IF.7a	C. Analyze functions using different representations.
	Building Functions [3 Items Max]
F.BF.1a	D. Build a function that models a relationship between two quantities.
	Linear, Quadratic, and Exponential [3 Items Max]
F.LE.1c	F. Construct and compare linear, quadratic, and exponential models and solve problems.
Statistics and Probability [6-7 Items; 15-18%]	
	Interpreting Categorical and Quantitative Data [7 Items Max]
S.ID.1-2	A. Summarize, represent, and interpret data on a single count or measurement variable.
S.ID.9	C. Interpret linear models.
40	**Total Items**

WYOMING DEPARTMENT OF EDUCATION

WY-TOPP

DOK	Min. - Max.	%
1	6-10	15%-25%
2	20-26	50%-65%
3	6-10	15%-25%

DOK = Depth of Knowledge

edu.wyoming.gov/blueprints

KEY

Domain - Reporting Category
Benchmarks & Standard

10th Grade Mathematics 2018+ WY-TOPP Summative Assessment Blueprint		Max # of Items Per Standard
Geometry [40 Items; 100%]		
	Congruence [13-15 Items; 33-38%]	
G.CO.1-5	A. Experiment with transformations in the plane.	**8**
G.CO.6-8	B. Understand congruence in terms of rigid motions.	**5**
G.CO.9-11	C. Prove geometric theorems.	**5**
G.CO.12-13	D. Make geometric constructions.	**3**
	Similarity, Right Triangles, Trigonometry, and Circles [9-11 Items; 23-28%]	
G.SRT.1-3	E. Understand similarity in terms of similarity transformations.	**6**
G.SRT.4-5	F. Prove theorems involving similarity.	**3**
G.SRT.6 & 8	G. Define trigonometric ratios and solve problems involving right triangles.	**4**
G.C.1-2	I. Understand and apply theorems about circles.	**4**
	Expressing Geometric Properties with Equations [8-10 Items; 20-25%]	
G.GPE.1	K. Translate between the geometric description and the equation for a conic section.	**3**
G.GPE.4-7	L. Use coordinates to prove simple geometric theorems algebraically.	**8**
	Geometric Measurement and Dimension & Modeling [8-10 Items; 20-25%]	
G.GMD.1 & 3	M. Explain volume formulas and use them to solve problems.	**4**
G.GMD.4	N. Visualize relationships between two-dimensional and three-dimensional objects.	**2**
G.MG.1-3	O. Apply geometric concepts in modeling situations.	**6**
	Total Items	**40**