2018-19 NC Check-In 1
Grade 7 Mathematics
State Item Statistics

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Ratio and Proportional Relationships	**7.RP.1**	Compute unit rates associated with ratios of fractions to solve real-world and mathematical problems.	11*	Recall	49.9
			12*	Recall	64.0
			13*	Skill/Concept	46.7
			16*^	Skill/Concept	38.5
			17*^	Skill/Concept	13.8
	7.RP.2	Recognize and represent proportional relationships between quantities. a. Understand that a proportion is a relationship of equality between ratios. ○ Represent proportional relationships using tables and graphs. ○ Recognize whether ratios are in a proportional relationship using tables and graphs. ○ Compare two different proportional relationships using tables, graphs, equations, and verbal descriptions. b. Identify the unit rate (constant of proportionality) within two quantities in a proportional relationship using tables, graphs, equations, and verbal descriptions. c. Create equations and graphs to represent proportional relationships. d. Use a graphical representation of a proportional relationship in context to: ○ Explain the meaning of any point (x, y). ○ Explain the meaning of (0, 0) and why it is included. ○ Understand that the y-coordinate of the ordered pair $(1, r)$ corresponds to the unit rate and explain its meaning.	1	Skill/Concept	77.4
			2	Recall	51.6
			3	Skill/Concept	58.0
			7	Recall	78.1
			8	Recall	42.7
	7.RP.3	Use scale factors and unit rates in proportional relationships to solve ratio and percent problems.	18^	Skill/Concept	46.2
			19^	Skill/Concept	58.8
			23^	Skill/Concept	61.6
			24^	Recall	75.7
			25^	Skill/Concept	60.1
The Number System	**7.NS.3**	Solve real-world and mathematical problems involving numerical expressions with rational numbers using the four operations.	4	Skill/Concept	47.6
			5	Skill/Concept	45.0
			6	Recall	81.1
			14*^	Skill/Concept	20.1
			15*^	Skill/Concept	33.7
Geometry	**7.G.1**	Solve problems involving scale drawings of geometric figures by: • Building an understanding that angle measures remain the same and side lengths are proportional. • Using a scale factor to compute actual lengths and areas from a scale drawing. • Creating a scale drawing.	9*	Skill/Concept	40.8
			10*	Recall	40.3
			20^	Skill/Concept	41.3
			21^	Skill/Concept	56.3
			22^	Skill/Concept	48.5

* Items marked with an asterisk (*) are gridded response items.

^ Students had access to a calculator when completing items marked with a ^.

Note: Results from NC Check-Ins should not be compared across interims, districts, or the state.

Each math grade 7 NC Check-In assesses different content standards.