

**2019-20 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.	10*	Recall	49.9
			11*	Recall	64.0
			12*	Skill/Concept	46.7
			15*^	Skill/Concept	38.5
			16*^	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	75.4
			2	Skill/Concept	58.0
			6	Recall	78.1
			7	Recall	72.5
			17^	Skill/Concept	28.2
	7.RP.3	Use scale factors and unit rates in proportional relationships to solve ratio and percent problems.	18^	Skill/Concept	46.7
			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.	3	Skill/Concept	47.6
			4	Skill/Concept	45.0
			5	Recall	81.1
			13*^	Skill/Concept	20.1
			14*^	Strategic Thinking	10.0
Geometry	7.G.1	Solve problems involving scale drawings of geometric figures by: <ul style="list-style-type: none"> <li>• Building an understanding that angle measures remain the same and side lengths are proportional.</li> <li>• Using a scale factor to compute actual lengths and areas from a scale drawing.</li> <li>• Creating a scale drawing.</li> </ul>	8*	Skill/Concept	40.8
			9*	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.