Math 6+: Computation and Problem Solving
Proportional Reasoning and Percent

Rates, Ratios, Proportions, and Percent

Students	Learning Continuum Statements:
Students:	**RIT 181-190:** • Solves for a missing value in a proportion by basic reasoning with equivalent fractions
Students:	**RIT 191-200:** • Solves for a missing value in a proportion by basic reasoning with equivalent fractions • Uses a given unit rate to solve a one-step real-world problem • Uses ratios of whole numbers to calculate unit rates
Students:	**RIT 201-210:** • Calculates the unit rate from a table of a proportional relationship • Solves for a missing value in a proportion by basic reasoning with equivalent fractions • Solves real-world and mathematical problems using ratios or proportional reasoning • Uses a given unit rate to solve a one-step real-world problem • Uses ratios of whole numbers and decimals to calculate unit rates • Uses ratios of whole numbers and fractions to calculate unit rates • Uses ratios of whole numbers to calculate unit rates
Students:	**RIT 211-220:** • Calculates percents of numbers • Calculates the percent one number is of another number • Calculates the unit rate from a table of a proportional relationship • Calculates the whole when given a part and the percent • Solves for a missing value in a proportion by basic reasoning with equivalent fractions • Solves one-step percent problems within a real-world or mathematical context • Solves real-world and mathematical problems using ratios or proportional reasoning • Uses a given unit rate to solve a one-step real-world problem • Uses ratios of decimals to calculate unit rates • Uses ratios of whole numbers and decimals to calculate unit rates • Uses ratios of whole numbers and fractions to calculate unit rates • Uses ratios of whole numbers to calculate unit rates • Uses two given unit rates to solve a multi-step real-world problem

Students:	RIT 221-230:

- Calculates percents of numbers
- Calculates the percent one number is of another number
- Calculates the whole when given a part and the percent
- Determines the whole in a real-world percent problem given the part and the percent
- Solves for a missing value in a proportion by basic reasoning with equivalent fractions
- Solves for a missing value in a proportion by taking a cross product
- Solves multi-step percent problems within a real-world or mathematical context
- Solves one-step percent problems within a real-world or mathematical context
- Solves real-world and mathematical problems using ratios or proportional reasoning
- Uses a given unit rate to solve a multi-step real-world problem
- Uses a given unit rate to solve a one-step real-world problem
- Uses ratios of decimals to calculate unit rates
- Uses ratios of whole numbers and decimals to calculate unit rates
- Uses ratios of whole numbers and fractions to calculate unit rates
- Uses ratios of whole numbers to calculate unit rates
- Uses two given unit rates to solve a multi-step real-world problem
- Writes a proportion to solve a real-world problem

Students:	RIT 231-240:

- Calculates percents of numbers
- Calculates simple interest
- Calculates the percent one number is of another number
- Calculates the percent one number is of another number for percents greater than 100%
- Calculates the whole when given a part and the percent
- Determines the whole in a real-world percent problem given the part and the percent
- Solves for a missing value in a proportion by taking a cross product
- Solves multi-step percent problems within a real-world or mathematical context
- Solves one-step percent problems within a real-world or mathematical context
- Solves real-world and mathematical problems using ratios or proportional reasoning
- Solves real-world problems involving percent or fractional increase
- Uses a given unit rate to solve a multi-step real-world problem
- Uses a given unit rate to solve a one-step real-world problem
- Uses ratios of decimals to calculate unit rates
- Uses ratios of fractions to calculate unit rates
- Uses ratios of whole numbers and decimals to calculate unit rates
- Uses ratios of whole numbers to calculate unit rates
- Uses two given unit rates to solve a multi-step real-world problem
- Writes a corresponding linear equation for a given proportion
- Writes a proportion to solve a real-world problem

Students:	RIT 241-250:

- Calculates percents of numbers
- Calculates simple interest
- Calculates the percent one number is of another number
- Calculates the percent one number is of another number for percents greater than 100%
- Calculates the whole when given a part and the percent

- Solves for a missing value in a proportion by taking a cross product
- Solves multi-step percent problems within a real-world or mathematical context
- Solves one-step percent problems within a real-world or mathematical context
- Solves real-world and mathematical problems using ratios or proportional reasoning
- Solves real-world problems involving percent or fractional increase
- Uses a given unit rate to solve a multi-step real-world problem
- Uses ratios of fractions to calculate unit rates
- Uses two given unit rates to solve a multi-step real-world problem
- Writes a corresponding linear equation for a given proportion
- Writes a proportion to solve a real-world problem

Students: **RIT 251-260:**

- Calculates simple interest
- Calculates the percent one number is of another number for percents greater than 100%
- Solves for a missing value in a proportion by taking a cross product
- Solves multi-step percent problems within a real-world or mathematical context
- Solves real-world and mathematical problems using ratios or proportional reasoning
- Solves real-world problems involving percent or fractional increase
- Uses a given unit rate to solve a multi-step real-world problem
- Uses ratios of fractions to calculate unit rates
- Uses two given unit rates to solve a multi-step real-world problem
- Writes a proportion to solve a real-world problem

Students:
          RIT 261-270:

- Uses a given unit rate to solve a multi-step real-world problem
- Uses ratios of fractions to calculate unit rates