

**Delaware State Content Standards
correlated to
Merit Software Math Programs**

The Delaware Mathematics Curriculum Framework *content standards* define what every Delaware student should know and be able to do. The standards are not meant to define a chapter in a text or a unit of instruction. Rather, learning events and problem solving integrate topics and ideas across standards and curricular areas. The content is described throughout as a set of essential mathematical processes and knowledge with an emphasis on the use of technology, cooperative learning, the use of a variety of instructional techniques, and the student's active involvement in the learning process in every classroom.

Merit’s Math programs address the following Delaware State Content Standards:

- Grade 3 pg. 1-15
- Grades 4-5 pg. 16-29
- Grades 6-8 pg. 30-42

Grade 3

Subhead	Standard	Performance Indicator	Merit Software
Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.01 persist and solve problems from start to finish	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.02 investigate and build their understanding of mathematical content	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
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Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.01 model real-world situations using oral, written, concrete, pictorial, graphical and algebraic methods	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.03 use mathematical notation and language to describe and discuss real-world situations	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
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Reason Mathematically	STANDARD #3 Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.	3.01 formulate and test conjectures	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
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Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.01 make connections linking conceptual and procedural knowledge	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
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Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.10 estimate and then measure length, perimeter, time, temperature, and weight/mass to the nearest unit using standard and nonstandard units;	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.11 determine the value of a given set of coins;	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.12 measure and compute the perimeter of rectangles;	Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.13 use multiple computational procedures with whole numbers;	Word Problem Shape-Up Set 1, 2, 3

<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.14 add and subtract single-digit and multi-digit whole numbers;</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.15 multiply whole numbers using at least one single-digit factor ;</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.16 divide whole numbers using single-digit divisors;</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>

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Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.18 round whole numbers and values of money as an estimation strategy	Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.19 select appropriate measures to compare objects	Word Problem Shape-Up Set 1, 2, 3

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<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.21 read and write decimal notation when representing money.</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>
<p>Number Sense</p>	<p>STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.</p>	<p>6.10 connect physical, verbal and symbolic representations of whole numbers;</p>	<p>Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3</p>

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Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.13 decompose and recompose whole numbers using addition and subtraction	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.14 build whole numbers using the concept of place value using base ten	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.15 demonstrate an understanding of order relations for whole numbers	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.16 examine the relative effect of operations on whole numbers	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.18 connect repeated addition with multiplication and repeated subtraction with division	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.10 represent operations with symbols	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.11 use symbols as representations of variables such as missing addends or factors	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.12 generate and write number sentences vertically and horizontally	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.13 solve open sentences using informal methods	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.10 collect data by observing, measuring, surveying and counting	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.11 demonstrate a variety of techniques for representing and organizing data such as using physical objects, tallies, pictographs, and bar graphs	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.12 interpret data by: looking for patterns and relationships, considering cause and effect, drawing conclusions, answering the stated question or related questions	Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.13 determine the likelihood of a simple chance event	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.10 sort and classify objects by common attributes	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.12 sort numbers into different classes such as evens, odds, multiples and factors	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Grades 4-5

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Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.01 persist and solve problems from start to finish	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.02 investigate and build their understanding of mathematical content	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.03 formulate problems from everyday and mathematical situations	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

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Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.06 generalize strategies and solutions to new problem situations	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.01 model real-world situations using oral, written, concrete, pictorial, graphical and algebraic methods	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
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Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.40 estimate and then measure length, perimeter, time, temperature, weight/mass, capacity and area to the degree of accuracy required using standard and nonstandard units	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.41 describe the structure and the use of systems of measurement	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.42 estimate, measure and compute the perimeter of polygons	Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.43 use algorithms for addition, subtraction, multiplication and division with understanding	Word Problem Shape-Up Set 1, 2, 3

<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.44 use multiple computational procedures to add and subtract fractions and decimals, to multiply fractions, and to divide whole numbers using multi-digit divisors</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.45 estimate, measure and compute the area of rectangles</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.46 make estimates before measuring and computing and determine if an estimate is reasonable</p>	<p>Word Problem Shape-Up Set 1, 2, 3</p>

Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.47 round decimals as an estimation strategy	Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.48 determine if an estimate is more appropriate than an exact answer	Word Problem Shape-Up Set 1, 2, 3
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.49 make change by counting on and counting back	Word Problem Shape-Up Set 1, 2, 3

Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.40 connect physical, verbal and symbolic representations of fractions, decimals, and whole numbers ;	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.41 decompose and recompose whole numbers using all arithmetic operations;	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.43 demonstrate the need for and the connection between decimals and fractions ;	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.44 demonstrate an understanding of order relations for fractions, decimals, and whole numbers using physical, verbal and symbolic representations	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3

Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.45 examine the relative effect of operations on whole numbers, fractions, and decimals	Fraction Shape-Up; Word Problem Shape-Up Set 1, 2, 3
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.40 solve equations using methods such as inverse operations, mental math, and guess and check	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.41 find solutions to inequalities from a given replacement set	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.42 use letters as variable representations	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.40 systematically collect, organize and describe data;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.41 construct and describe displays of data;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.42 calculate and use the mean to interpret data;	Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.43 select and use data displays such as line plots, tables, histograms, and scale pictographs;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.44 interpret data and make convincing arguments that are based on data analysis and previous experiences	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.45 list all possible outcomes for an experiment using a tree diagram	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.46 find the probability of a single event based on an experiment with equally likely outcomes	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.40 recognize, analyze, create, extend and describe a wide variety of patterns	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.41 investigate and predict the results of combining, subdividing and changing shapes	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.42 use tables, rules, variables, open sentences and graphs to describe patterns, functions, and other relationships	Pre-Algebra Shape-Up
Patterns, Relationships and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.43 identify patterns for explaining the concepts of computation	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Grades 6-8

Subhead	Standard	Performance Indicator	Merit Software
Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.01 persist and solve problems from start to finish	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.02 investigate and build their understanding of mathematical content	Word Problem Shape-Up Set 1, 2, 3
Solve Problems	<p>STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.</p>	1.03 formulate problems from everyday and mathematical situations	Word Problem Shape-Up Set 1, 2, 3

Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.04 develop and apply strategies to solve problems	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.05 interpret results with respect to the original problem	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Solve Problems	STANDARD #1 Students will develop their ability to SOLVE PROBLEMS by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts; to formulate their own problems; to find solutions to problems from everyday situations; to develop and apply strategies to solve a wide variety of problems; and to integrate mathematical reasoning, communication and connections.	1.06 generalize strategies and solutions to new problem situations	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.01 model real-world situations using oral, written, concrete, pictorial, graphical and algebraic methods	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.03 use mathematical notation and language to describe and discuss real-world situations	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.04 read mathematics with understanding	Word Problem Shape-Up Set 1, 2, 3

Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.05 develop common understandings of mathematical ideas and use generalizations discovered through investigations to formulate definitions	Word Problem Shape-Up Set 1, 2, 3
Communicate Mathematically	STANDARD #2 Students will develop their ability to COMMUNICATE MATHEMATICALLY by solving problems in which there is a need to obtain information from the real world through reading, listening and observing; to translate this information into mathematical language and symbols; to process this information mathematically; and to present results in written, oral and visual formats.	2.06 ask questions to clarify the problem situation	Word Problem Shape-Up Set 1, 2, 3
Reason Mathematically	STANDARD #3 Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.	3.01 formulate and test conjectures	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Reason Mathematically	STANDARD #3 Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.	3.02 draw and then justify conclusions;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Reason Mathematically	STANDARD #3 Students will develop their ability to REASON MATHEMATICALLY by solving problems in which there is a need to investigate significant mathematical ideas in all content areas; to justify their thinking; to reinforce and extend their logical reasoning abilities; to reflect on and clarify their own thinking; to ask questions to extend their thinking; and to construct their own learning.	3.04 use properties, models, known facts, and relationships to explain and defend their thinking.	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.01 make connections linking conceptual and procedural knowledge	Word Problem Shape-Up Set 1, 2, 3
Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.03 use connections among mathematical topics	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2

Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.04 use various representations of the same concept	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.05 make connections from manipulative solutions to algorithmic solutions to technological solutions	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Mathematical Connections	STANDARD #4 Students will develop their ability to make MATHEMATICAL CONNECTIONS by solving problems in which there is a need to view mathematics as an integrated whole and to integrate mathematics with other disciplines, while allowing the flexibility to approach problems, from within and outside mathematics, in a variety of ways.	4.06 determine the reasonableness of a mathematical solution as it applies in a real-world situation	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up; Basic Algebra Shape-Up Set 1 & 2
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.60 estimate and then measure angles, circumference, volume and surface area to the degree of accuracy required using standard and nonstandard units;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.61 convert measurement units within the same system</p>	<p>Pre-Algebra Shape-Up</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.62 apply ratios, proportions and percents to real life situations;</p>	<p>Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up</p>
<p>Estimation, Measurement, and Computation</p>	<p>Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.</p>	<p>5.64 apply order of operations;</p>	<p>Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up</p>

Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.65 choose and explain an appropriate method for calculating an answer in a given situation;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.66 use multiple computational procedures with rational numbers;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Estimation, Measurement, and Computation	Standard Five Students will develop an understanding of ESTIMATION, MEASUREMENT, and COMPUTATION by solving problems in which there is a need to measure to a required degree of accuracy by selecting appropriate tools and units; to develop computing strategies and select appropriate methods of calculation from among mental math, paper and pencil, calculators or computers; to use estimating skills to approximate an answer and to determine the reasonableness of results.	5.67 determine if an estimate is an over-estimate or an under-estimate.	Pre-Algebra Shape-Up

Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.60 connect physical, verbal and symbolic representations of rational numbers	Pre-Algebra Shape-Up
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.61 apply multiple representations of numbers: integers, fractions, decimals, percents, exponents, and scientific notation	Pre-Algebra Shape-Up
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.63 demonstrate an understanding of order relations for rational numbers	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.64 examine the relative effect of operations on rational numbers;	Pre-Algebra Shape-Up

Number Sense	STANDARD #6 Students will develop NUMBER SENSE by solving problems in which there is a need to represent and model real numbers verbally, physically and symbolically; to use operations with understanding; to explain the relationships between numbers; to apply the concept of a unit; and to determine the relative magnitude of real numbers.	6.65 use various forms of "one" to demonstrate the equivalence of fractions	Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.60 represent situations with tables, graphs, verbal rules, and equations; and describe the interrelationships of the representations	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.61 model and solve real-world and mathematical problems using algebraic methods;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.62 evaluate algebraic expressions and formulas for given values of the variable	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up

Algebra	STANDARD #7 Students will develop an understanding of ALGEBRA by solving problems in which there is a need to progress from the concrete to the abstract using physical models, equations and graphs; to generalize number patterns; and to describe, represent and analyze relationships among variable quantities.	7.64 solve proportions	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.60 collect, organize, describe, and make predictions with data	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.61 construct and describe displays of data such as stem-and-leaf plots, scatter plots, box plots, and circle graphs	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.62 make and evaluate arguments that are based on data analysis	Pre-Algebra Shape-Up

Statistics and Probability	STANDARD #9 Students will develop an understanding of STATISTICS AND PROBABILITY by solving problems in which there is a need to collect, appropriately represent, and interpret data; to make inferences or predictions; to present convincing arguments; and to model mathematical situations to determine the probability.	9.63 calculate and use mean, median, mode and range to interpret data;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships, and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.60 recognize, analyze, create, extend, describe and generalize a wide variety of patterns and relationships	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships, and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.61 analyze functional relationships to explain how a change in one quantity results in a change in another	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships, and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.63 detect patterns and functions from statistical data	Pre-Algebra Shape-Up

Patterns, Relationships, and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.64 use a calculator and computer software to explore number patterns and mathematical relationships;	Word Problem Shape-Up Set 1, 2, 3; Pre-Algebra Shape-Up
Patterns, Relationships, and Functions	STANDARD #10 Students will develop an understanding of PATTERNS, RELATIONSHIPS AND FUNCTIONS by solving problems in which there is a need to recognize and extend a variety of patterns; and to analyze, represent, model and describe real-world functional relationships.	10.65 use patterns and functions to represent and solve problems.	Pre-Algebra Shape-Up