

PA Core Mathematics Standards – Cluster Heading Matrix

Trifold – Grades 5-6-7

Domain	Grade 5	Grade 6	Grade 7
Counting and Cardinality			
Operations and Algebraic Thinking	<ul style="list-style-type: none"> Write and interpret numerical expressions. Analyze patterns and relationships. 		
Number and Operations in Base Ten	<ul style="list-style-type: none"> Understand the place value system. Perform operations with multi-digit whole numbers and with decimals to hundredths. 		
Number and Operations— Fractions	<ul style="list-style-type: none"> Use equivalent fractions as a strategy to add and subtract fractions. Apply and extend previous understandings of multiplication and division to multiply and divide fractions. 		
Measurement and Data	<ul style="list-style-type: none"> Convert like measurement units within a given measurement system. Represent and interpret data. Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition. 		
Ratios and Proportional Relationships		<ul style="list-style-type: none"> Understand ratio concepts and use ratio reasoning to solve problems. 	<ul style="list-style-type: none"> Analyze proportional relationships and use them to solve real-world and mathematical problems.
The Number System		<ul style="list-style-type: none"> Apply and extend previous understandings of multiplication and division to divide fractions by fractions. Apply and extend previous understandings of numbers to the system of rational numbers. 	<ul style="list-style-type: none"> Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
Expressions and Equations		<ul style="list-style-type: none"> Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities. Represent and analyze quantitative relationships between dependent and independent variables. 	<ul style="list-style-type: none"> Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
Functions			
Geometry	<ul style="list-style-type: none"> Graph points on the coordinate plane to solve real world and mathematical problems. Classify two-dimensional figures into categories based on their properties. 	<ul style="list-style-type: none"> Solve real-world and mathematical problems involving area, surface area, and volume. 	<ul style="list-style-type: none"> Draw, construct and describe geometrical figures and describe the relationships between them. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.
Statistics and Probability		<ul style="list-style-type: none"> Develop understanding of statistical variability. Summarize and describe distribution. 	<ul style="list-style-type: none"> Use random sampling to draw inferences about a population Draw informal comparative inferences about two populations. Investigate chance processes and develop, use, and evaluate probability models.



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