Curriculum Category Shift
Standard Areas
Grades K-8 and High School

PA Academic Standards	PA Common Core State Standards
2.4. Mathematical Reasoning and Connections 2.5. Mathematical Problem Solving and Communication	Mathematical Practices
2.1. Numbers, Number Systems and Number Relationships 2.2. Computation and Estimation	2.1 Numbers and Operations
2.8. Algebra and Functions 2.11. Concepts of Calculus	2.2 Algebraic Concepts
2.9. Geometry 2.10. Trigonometry	2.3 Geometry
2.3. Measurement and Estimation 2.6. Statistics and Data Analysis 2.7. Probability and Predictions	2.4 Data Analysis and Probability

Curriculum Category Shift
Standard Areas
Grades K – 8 and HS

PA Academic Standards Areas/Conceptual Strands	PA Common Core State Standards Areas/Conceptual Strands
2.4. Mathematical Reasoning and Connections *Reasoning* *Connections* **2.5. Mathematical Problem Solving and Communication** *Problem Solving* *Communication*	**Mathematical Practices** 1. *Make sense of problems and persevere in solving them* 2. *Use appropriate tools strategically* 3. *Reason abstractly and quantitatively (Contextualize and Decontextualize)* 4. *Attend to precision (in communication)* 5. *Construct viable arguments and critique the reasoning of others* 6. *Look for and make use of structure* 7. *Model with mathematics (Real World)* 8. *Look for and make sense of regularity in repeated reasoning*
2.1. Numbers, Number Systems and Number Relationships *Count and Compare Numbers* *Represent Numbers in Equivalent Forms* *Concepts of Numbers and Relationships* *Place Value* *Number Theory* *Concepts and Applications of Operations* **2.2. Computation and Estimation** *Fluency in Basic Facts* *Computation* *Evaluate Numerical Expressions* *Numerical Estimation*	**2.1 Numbers and Operations** A) *Counting and Cardinality* B) *Number and Operations in Base Ten* C) *Number and Operations—Fractions* D) *Ratios and Proportional Relationships* E) *Number and Quantity*

PA Academic Standards Areas/Conceptual Strands	PA Common Core State Standards Areas/Conceptual Strands
2.8. Algebra and Functions *Algebraic Properties* *Algebraic Manipulations* *Patterns* *Functions* *Modeling* *Interpret Results of Modeling* **2.11. Concepts of Calculus** *Extreme Values* *Rates* *Accumulation of Areas and Volumes*	**2.2 Algebraic Concepts** A) *Operations and Algebra thinking* B) *Expressions & Equations* C) *Functions* D) *Algebra*
2.9. Geometry *Definitions, Properties, and Relations* *Transformations and Symmetry* *Coordinate Geometry* **2.10. Trigonometry** *Right Triangle Concepts and Applications* *Trigonometric Functions*	**2.3 Geometry** A) *Geometry*

PA Academic Standards Areas/Conceptual Strands	PA Common Core State Standards Areas/Conceptual Strands
2.3. Measurement and Estimation *Concept of Measurement* *Units and Tools of Measurement* *Calculations* *Conversions* *Relations* *Measurement Estimation* **2.6. Statistics and Data Analysis** *Collection of Data* *Organization and Display of Data* *Numerical Summaries* *Statistical Comparisons* *Interpretation of Data* **2.7. Probability and Predictions** *Calculate Probabilities* *Prediction of Outcomes* *Representations of Probabilities* *Display Simple Spaces* *Compare Theoretical and Experimental Probabilities*	**2.4 Data Analysis and Probability** A) *Measurement and Data* B) *Statistics &Probability*

Changes

The PA Common Core State Standards emphasize the importance of the Mathematical Practices across all grade levels.

The old PA Academic Standards had eleven standards areas with multiple conceptual stands. For each conceptual strand there may or may not be a Standard for that grade level.

The PA CCSS reflects four standard areas with fewer conceptual strands in which there may be multiple standards within that strand. The conceptual strands build upon each other, relying on mastery of the standards in one strand in order to progress to the next. The new standards build upon each other in complexity and rigor as grade levels progress.