Curriculum Map: 4th Grade Math

Course: MATHEMATICS Sub-topic: General

Grade(s): 4

Course Description: i-Ready Classroom Mathematics is a robust mathematics program that helps students become strong, independent mathematical thinkers. The program uses a different approach to math instruction that focuses on learning through problem solving. The use of daily embedded learning routines allows teachers to guide students through discourse-based instruction as they strengthen their conceptual understanding of mathematics. These routines ensure that all students develop the problem-solving skills needed to become independent and confident mathematical thinkers.

Pacing https://teacher-toolbox.i-ready.com/assets/downloadAsset/

Calendar: 15904f23-5979-4cde-94e3-7e96efb334e6?fileName=RCM04_CC_TG_FM_Pacing_Guidance.pdf

Unit: Unit 1 - Whole Numbers - Place Value, Comparison, Addition, and Subtraction

Unit

Description: This unit extends students' understanding of adding and subtracting whole numbers.

Unit Big Ideas:

You can use what you know about place value to read, write, and compare multi-digit numbers.

Knowing that each place in

STANDARDS: STANDARDS

STATE: PA Core Standards (2014)

CC.2.1.4.B.2 Use place-value understanding and properties of operations to (Advanced) perform multi-digit arithmetic.

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common

Core Standards (2013)

M04.A-T.1.1.2 Read and write whole numbers in expanded, standard, and

(Advanced) word form through 1,000,000.

M04.A-T.1.1.3 Compare two multi-digit numbers through 1,000,000 based on

(Advanced) meanings of the digits in each place, using >, =, and

M04.A-T.1.1.4 Round multi-digit whole numbers (through 1,000,000) to any

(Advanced) place.

M04.A-T.2.1.1 Add and subtract multi-digit whole numbers (limit sums and

(Advanced) subtrahends up to and including 1,000,000).

(* standards consolidated from Topic level)

Topic: Lesson 1 - Understand Place Value

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-T.1.1.2 (Advanced) Read and write whole numbers in expanded, standard, and word form through

1,000,000.

M04.A-T.1.1.3 (Advanced) Compare two multi-digit numbers through 1,000,000 based on meanings of the

digits in each place, using >, =, and < symbols.

M04.A-T.1.1.4 (Advanced) Round multi-digit whole numbers (through 1,000,000) to any place.

Topic: Lesson 2 - Comparing Whole Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-T.1.1.2 (Advanced) Read and write whole numbers in expanded, standard, and word form through

1,000,000.

M04.A-T.1.1.3 (Advanced) Compare two multi-digit numbers through 1,000,000 based on meanings of the

digits in each place, using >, =, and < symbols.

Topic: Lesson 3 - Round Whole Numbers

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-T.1.1.4 (Advanced) Round multi-digit whole numbers (through 1,000,000) to any place.

Topic: Lesson 4 - Add Whole Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-T.2.1.1 (Advanced) Add and subtract multi-digit whole numbers (limit sums and subtrahends up to and including 1,000,000).

Topic: Lesson 5 - Subtract Whole Numbers

Minutes for Topic: 90

STANDARDS

STATE: PA Core Standards (2014)

CC.2.1.4.B.2 (Advanced)

Use place-value understanding and properties of operations to perform multi-digit arithmetic.

Unit: Unit 2 - Operations - Multiplication, Division, and Algebraic Thinking

STANDARDS: STA

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.B-O.1.1.1 Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.

M04.B-O.1.1.2 Multiply or divide to solve word problems involving multiplicative comparison, dictinguishing multiplicative.

(Advanced) multiplicative comparison, distinguishing multiplicative comparison from additive comparison.

M04.B-0.1.1.3 Solve multi-step word problems posed with whole numbers

(Advanced) using the four operations. Answers will be either whole numbers or have remainders that must be interpreted yielding a final answer that is a whole number. Represent these

problems using equations with a symbol or letter standing for the unknown quantity.

M04.B-O.2.1.1 Find all factor pairs for a whole number in the interval 1 (Advanced) through 100. Recognize that a whole number is a multiple of

each of its factors. Determine whether a given whole number in the interval 1 through 100 is a multiple of a given one-digit number. Determine whether a given whole number in the interval 1 through 100 is prime or composite.

M04.B-0.3.1.1 Generate a number or shape pattern that follows a given rule. (Advanced) Identify apparent features of the pattern that were not explicit

in the rule itself.

(* standards consolidated from Topic level)

Topic: Lesson 6 - Understand Multiplication as a Comparison

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.B-O.1.1.1 (Advanced) Interpret a multiplication equation as a comparison. Represent verbal statements of multiplicative comparisons as multiplication equations.

Topic: Lesson 7 - Multiplication and Division in Word Problems

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.B-O.1.1.2 (Advanced) Multiply or divide to solve word problems involving multiplicative comparison,
distinguishing multiplicative comparison from additive comparison.

Topic: Lesson 8 - Multiples and Factors

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.B-O.2.1.1 (Advanced) Find all factor pairs for a whole number in the interval 1 through 100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the interval 1 through 100 is a multiple of a given one-digit number. Determine whether a given whole number in the interval 1 through 100 is prime or composite.

Topic: Lesson 9 - Number and Shape Patterns

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.B-O.3.1.1 (Advanced) Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Topic: Lesson 10 - Model and Solve Multi-Step Problems

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.B-O.1.1.3 (Advanced) Solve multi-step word problems posed with whole numbers using the four operations. Answers will be either whole numbers or have remainders that must be interpreted yielding a final answer that is a whole number. Represent these problems using equations with a symbol or letter standing for the unknown quantity.

Unit: Unit 3 - Multi-Digit Operations and Measurement - Multiplication, Division, Perimeter, and Area STANDARDS: **STANDARDS**

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

Multiply a whole number of up to four digits by a one-digit M04.A-T.2.1.2

 (Advanced) whole number and multiply 2 two-digit numbers.

M04.A-T.2.1.3 Divide up to four-digit dividends by one-digit divisors with

(Advanced) answers written as whole-number quotients and remainders.

M04.D-M.1.1.1 Know relative sizes of measurement units within one system :

(Advanced) of units including standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single

system of measurement, express measurements in a larger unit in terms of a smaller unit. A table of equivalencies will be

provided.

M04.D-M.1.1.3 Apply the area and perimeter formulas for rectangles in real-

(Advanced) world and mathematical problems (may include finding a missing side length). Whole numbers only. The formulas will

be provided.

 (* standards consolidated from Topic level)

Topic: Lesson 11 - Multiply by One-Digit Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-T.2.1.2 (Advanced) Multiply a whole number of up to four digits by a one-digit whole number and

multiply 2 two-digit numbers.

Topic: Lesson 12 - Multiply by Two-Digit Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-T.2.1.2 (Advanced) Multiply a whole number of up to four digits by a one-digit whole number and

multiply 2 two-digit numbers.

Topic: Lesson 13 - Use Multiplication to Convert Measurements

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.D-M.1.1.1 (Advanced) Know relative sizes of measurement units within one system of units including standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A table of equivalencies will be provided.

Topic: Lesson 14 - Divide Three-Digit Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-T.2.1.3 (Advanced) Divide up to four-digit dividends by one-digit divisors with answers written as wholenumber quotients and remainders.

Topic: Lesson 15 - Divide Four-Digit Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-T.2.1.3 (Advanced) Divide up to four-digit dividends by one-digit divisors with answers written as wholenumber quotients and remainders.

Topic: Lesson 16 - Find Perimeter and Area

(Advanced)

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.D-M.1.1.3 (Advanced) Apply the area and perimeter formulas for rectangles in real-world and mathematical problems (may include finding a missing side length). Whole numbers only. The formulas will be provided.

Unit: Unit 4 - Fractions, Decimals, and Measurement - Addition, Subtraction, and Multiplication STANDARDS: STANDARDS Standards (2014)

STATE: PA Core Standards (2014)		
CC.2.4.4.A.4	Represent and interpret data involving fractions using	
(Advanced)	information provided in a line plot.	
	<u> Assessment Anchors - Mathematics Aligned to the Pennsylvania</u>	Common
Core Standards (201	<u>3)</u>	
M04.A-F.1.1.1 (Advanced)	Recognize and generate equivalent fractions.	
M04.A-F.1.1.2 (Advanced)	Compare two fractions with different numerators and different denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100) using the symbols $>$, $=$, or	
M04.A-F.2 (Advanced)	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	
M04.A-F.2.1 (Advanced)	Solve problems involving fractions and whole numbers (straight computation or word problems).	
M04.A-F.2.1.1 (Advanced)	Add and subtract fractions with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; answers do not need to be simplified; and no improper fractions as the final answer).	
M04.A-F.2.1.2 (Advanced)	Decompose a fraction or a mixed number into a sum of fractions with the same denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100), recording the decomposition by an equation. Justify decompositions (e.g., by using a visual fraction model).	
M04.A-F.2.1.3 (Advanced)	Add and subtract mixed numbers with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; no regrouping with subtraction; fractions do not need to be simplified; and no improper fractions as the final answers).	
M04.A-F.2.1.4 (Advanced)	Solve word problems involving addition and subtraction of fractions referring to the same whole or set and having like denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).	
M04.A-F.2.1.5	Multiply a whole number by a unit fraction (denominators	

limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100 and final answers

do not need to be simplified or written as a mixed number).

M04.A-F.2.1.6 (Advanced)	Multiply a whole number by a non-unit fraction (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100 and final answers do not need to be simplified or written as a mixed number).	
M04.A-F.2.1.7 (Advanced)	Solve word problems involving multiplication of a whole number by a fraction (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).	
M04.A-F.3.1 (Advanced)	Use operations to solve problems involving decimals, including converting between fractions and decimals (may include word problems).	
M04.A-F.3.1.1 (Advanced)	Add two fractions with respective denominators 10 and 100.	
M04.A-F.3.1.2 (Advanced)	Use decimal notation for fractions with denominators 10 or 100.	
M04.A-F.3.1.3 (Advanced)	Compare two decimals to hundredths using the symbols >, =, or <_2c_ and="" justify="" the="">	
M04.D-M.1 (Advanced)	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.	
M04.D-M.1.1 (Advanced)	Solve problems involving length, weight (mass), liquid volume, time, area, and perimeter.	
M04.D-M.1.1.1 (Advanced)	Know relative sizes of measurement units within one system of units including standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A table of equivalencies will be provided.	
M04.D-M.1.1.2 (Advanced)	Use the four operations to solve word problems involving distances, intervals of time (such as elapsed time), liquid volumes, masses of objects; money, including problems involving simple fractions or decimals; and problems that require expressing measurements given in a larger unit in terms of a smaller unit.	
M04.D-M.1.1.4 (Advanced)	Identify time (analog or digital) as the amount of minutes before or after the hour.	

(* standards consolidated from Topic level)

Topic: Lesson 17 - Understand Equivalent Fractions

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-F.1.1.1 (Advanced) Recognize and generate equivalent fractions.

Topic: Lesson 18 - Compare Fractions

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.1.1.2 (Advanced) Compare two fractions with different numerators and different denominators (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100) using the symbols >, =,

or < and justify the conclusions.

Topic: Lesson 19 - Understand Fraction Addition and Subtraction

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.2.1.1 (Advanced) Add and subtract fractions with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; answers do not need to be simplified; and no improper fractions as the final answer).

Topic: Lesson 20 - Adding and Subtracting Fractions

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.2 (Advanced) Build fractions from unit fractions by applying and extending previous

understandings of operations on whole numbers.

M04.A-F.2.1 (Advanced) Solve problems involving fractions and whole numbers (straight computation or

word problems).

M04.A-F.2.1.1 (Advanced) Add and subtract fractions with a common denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; answers do not need to be simplified; and no

improper fractions as the final answer).

M04.A-F.2.1.2 (Advanced) Decompose a fraction or a mixed number into a sum of fractions with the same

denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100), recording the decomposition by an equation. Justify decompositions (e.g., by using a visual

fraction model).

Solve word problems involving addition and subtraction of fractions referring to the M04.A-F.2.1.4 (Advanced)

same whole or set and having like denominators (denominators limited to 2, 3, 4, 5,

6, 8, 10, 12, and 100).

Topic: Lesson 21 - Add and Subtract Mixed Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.2 (Advanced) Build fractions from unit fractions by applying and extending previous

understandings of operations on whole numbers.

M04.A-F.2.1.2 (Advanced) Decompose a fraction or a mixed number into a sum of fractions with the same

> denominator (denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100), recording the decomposition by an equation. Justify decompositions (e.g., by using a visual

fraction model).

Add and subtract mixed numbers with a common denominator (denominators M04.A-F.2.1.3 (Advanced)

limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100; no regrouping with subtraction; fractions do not need to be simplified; and no improper fractions as the final answers).

Topic: Lesson 22 - Add and Subtract Fractions in Line Plots

Minutes for Topic: 90

STANDARDS

STATE: PA Core Standards (2014)

Represent and interpret data involving fractions using information provided in a line CC.2.4.4.A.4 (Advanced)

plot.

Topic: Lesson 23 - Understand Fraction Multiplication

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

Build fractions from unit fractions by applying and extending previous M04.A-F.2 (Advanced)

understandings of operations on whole numbers.

M04.A-F.2.1.5 (Advanced) Multiply a whole number by a unit fraction (denominators limited to 2, 3, 4, 5, 6, 8,

10, 12, and 100 and final answers do not need to be simplified or written as a mixed

Multiply a whole number by a non-unit fraction (denominators limited to 2, 3, 4, 5, M04.A-F.2.1.6 (Advanced)

6, 8, 10, 12, and 100 and final answers do not need to be simplified or written as a

mixed number).

M04.A-F.2.1.7 (Advanced) Solve word problems involving multiplication of a whole number by a fraction

(denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).

Topic: Lesson 24 - Multiply Fractions by Whole Numbers

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

Solve problems involving fractions and whole numbers (straight computation or M04.A-F.2.1 (Advanced)

word problems).

M04.A-F.2.1.5 (Advanced) Multiply a whole number by a unit fraction (denominators limited to 2, 3, 4, 5, 6, 8,

10, 12, and 100 and final answers do not need to be simplified or written as a mixed

M04.A-F.2.1.6 (Advanced) Multiply a whole number by a non-unit fraction (denominators limited to 2, 3, 4, 5,

6, 8, 10, 12, and 100 and final answers do not need to be simplified or written as a

mixed number).

M04.A-F.2.1.7 (Advanced) Solve word problems involving multiplication of a whole number by a fraction

(denominators limited to 2, 3, 4, 5, 6, 8, 10, 12, and 100).

Topic: Lesson 25 - Fractions as Tenths and Hundredths

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013) M04.A-F.3.1.1 (Advanced) Add two fractions with respective denominators 10 and 100.

Topic: Lesson 26 - Relate Decimals and Fractions

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.3.1 (Advanced) Use operations to solve problems involving decimals, including converting between

fractions and decimals (may include word problems).

M04.A-F.3.1.2 (Advanced) Use decimal notation for fractions with denominators 10 or 100.

Topic: Lesson 27 - Compare Decimals

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.A-F.3.1.2 (Advanced) Use decimal notation for fractions with denominators 10 or 100.

M04.A-F.3.1.3 (Advanced) Compare two decimals to hundredths using the symbols >, =, or <, and justify the

conclusions.

Topic: Lesson 28 - Problems about Time and Money

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.D-M.1 (Advanced) Solve problems involving measurement and conversion of measurements from a

larger unit to a smaller unit.

M04.D-M.1.1 (Advanced) Solve problems involving length, weight (mass), liquid volume, time, area, and

perimeter.

M04.D-M.1.1.1 (Advanced) Know relative sizes of measurement units within one system of units including

standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A

table of equivalencies will be provided.

M04.D-M.1.1.2 (Advanced) Use the four operations to solve word problems involving distances, intervals of time

(such as elapsed time), liquid volumes, masses of objects; money, including problems involving simple fractions or decimals; and problems that require expressing measurements given in a larger unit in terms of a smaller unit.

M04.D-M.1.1.4 (Advanced) Identify time (analog or digital) as the amount of minutes before or after the hour.

Topic: Lesson 29 - Problems about Length, Liquid Volume, Mass, and Weight

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.D-M.1 (Advanced) Solve problems involving measurement and conversion of measurements from a

larger unit to a smaller unit.

M04.D-M.1.1 (Advanced) Solve problems involving length, weight (mass), liquid volume, time, area, and

perimeter.

M04.D-M.1.1.1 (Advanced) Know relative sizes of measurement units within one system of units including

standard units (in., ft, yd, mi; oz., lb; and c, pt, qt, gal), metric units (cm, m, km; g, kg; and mL, L), and time (sec, min, hr, day, wk, mo, and yr). Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. A

table of equivalencies will be provided.

M04.D-M.1.1.2 (Advanced) Use the four operations to solve word problems involving distances, intervals of time

(such as elapsed time), liquid volumes, masses of objects; money, including problems involving simple fractions or decimals; and problems that require expressing measurements given in a larger unit in terms of a smaller unit.

Unit: Unit 5 - Geometry and Measurement - Figures, Cliassification, and Symmetry STANDARDS: STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.C-G.1 Draw and identify lines and angles, and classify shapes by

(Advanced) properties of their lines and angles.

M04.C-G.1.1 List properties, classify, draw, and identify geometric figures in

(Advanced)	two dimensions.	
M04.C-G.1.1.1 (Advanced)	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	
M04.C-G.1.1.2 (Advanced)	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.	
M04.C-G.1.1.3 (Advanced)	Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into mirroring parts. Identify line-symmetric figures and draw lines of symmetry (up to two lines of symmetry).	
M04.D-M.3 (Advanced)	Geometric measurement: understand concepts of angle; measure and create angles.	
M04.D-M.3.1 (Advanced)	Use appropriate tools and units to sketch an angle and determine angle measurements.	
M04.D-M.3.1.1 (Advanced)	Measure angles in whole-number degrees using a protractor. With the aid of a protractor, sketch angles of specified measure.	
M04.D-M.3.1.2 (Advanced)	Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems. (Angles must be adjacent and non-overlapping.)	

(* standards consolidated from Topic level)

Topic: Lesson 30 - Points, Lines, Rays, and AnglesMinutes for Topic: 90

STANDARDS	
State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards	
M04.C-G.1 (Advanced)	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
M04.C-G.1.1 (Advanced)	List properties, classify, draw, and identify geometric figures in two dimensions.
M04.C-G.1.1.1 (Advanced)	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
M04.C-G.1.1.2 (Advanced)	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

Topic: Lesson 31 - AnglesMinutes for Topic: 90

STANDARDS

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State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013	
M04.C-G.1 (Advanced)	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
M04.C-G.1.1 (Advanced)	List properties, classify, draw, and identify geometric figures in two dimensions.
M04.C-G.1.1.1 (Advanced)	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
M04.C-G.1.1.2 (Advanced)	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
M04.D-M.3 (Advanced)	Geometric measurement: understand concepts of angle; measure and create angles.
M04.D-M.3.1 (Advanced)	Use appropriate tools and units to sketch an angle and determine angle measurements.
M04.D-M.3.1.1 (Advanced)	Measure angles in whole-number degrees using a protractor. With the aid of a protractor, sketch angles of specified measure.

Topic: Lesson 32 - Add and Subtract with AnglesMinutes for Topic: 90

STANDARDS	
State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)	
M04.C-G.1 (Advanced)	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.
M04.C-G.1.1 (Advanced)	List properties, classify, draw, and identify geometric figures in two dimensions.
M04.C-G.1.1.1 (Advanced)	Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
M04.C-G.1.1.2 (Advanced)	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

M04.D-M.3.1.2 (Advanced) Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems. (Angles must be adjacent and non-overlapping.)

Topic: Lesson 33 - Classify Two-Dimensional Figures

Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.C-G.1 (Advanced) Draw and identify lines and angles, and classify shapes by properties of their lines

and angles.

M04.C-G.1.1 (Advanced) List properties, classify, draw, and identify geometric figures in two dimensions.

M04.C-G.1.1.1 (Advanced) Draw points, lines, line segments, rays, angles (right, acute, and obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

M04.C-G.1.1.2 (Advanced) Classify two-dimensional figures based on the presence or absence of parallel or

perpendicular lines or the presence or absence of angles of a specified size.

Recognize right triangles as a category, and identify right triangles.

Topic: Lesson 34 - Symmetry Minutes for Topic: 90

STANDARDS

State: Pennsylvania Assessment Anchors - Mathematics Aligned to the Pennsylvania Common Core Standards (2013)

M04.C-G.1 (Advanced) Draw and identify lines and angles, and classify shapes by properties of their lines

and angles.

M04.C-G.1.1.3 (Advanced) Recognize a line of symmetry for a two-dimensional figure as a line across the figure

such that the figure can be folded along the line into mirroring parts. Identify line-symmetric figures and draw lines of symmetry (up to two lines of symmetry).