



# Math Teachers Press, Inc.

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## PENNSYLVANIA ASSESSMENT ANCHORS AND ELIGIBLE CONTENT STANDARDS CORRELATED TO . *MOVING WITH MATH® EXTENSIONS GRADE 5*

		Student Book	Skill Builders
<b>M5.A</b>	<b>NUMBERS AND OPERATIONS</b>		
<b>M5.A.1</b>	<b>Demonstrate an understanding of numbers, ways of representing numbers, relationships among numbers and number systems.</b>		
<b>M5.A.1.1</b>	Express numbers in equivalent forms.	1, 28, 30-32, 34, 36-38, 40-42, 45	12-1, 12-2, 14-1, 21-1, 22-1, 25-1, 43-1, 47-2
<b>M5.A.1.1.1</b>	Use expanded notation to represent whole numbers or decimals (whole numbers less than 10,000,000 and decimals through hundredths).		
<b>M5.A.1.2</b>	Demonstrate understanding of place value of whole numbers and decimals.	1-6, 9-12, 15, 20, 40-43, 45, 47	1-1, 3-1, 3-2, 9-1, 10-1, 10-3, 23-1, 25-1, 26-1
<b>M5.A.1.2.1</b>	Match the standard form to the word form of decimal numbers through the hundredths.	40, 42	22-1, 43-1
<b>M5.A.1.2.2</b>	Identify the place value of a digit (from millions through hundredths).	1-6, 9-12, 15, 20, 40-43, 45	1-1, 3-1, 3-2, 10-1, 10-3, 21-1, 22-1, 23-1, 25-1, 43-1
<b>M5.A.1.3</b>	Compare quantities or magnitudes of numbers.	1, 3-7, 11, 12, 16, 18, 21, 27, 30-32, 36, 42-45, 55, 61, 62	2-1, 3-1, 3-2, 4-1, 8-2, 13-1, 23-1, 24-1, 36-1, 40-1, 41-1, 42-1, 46-1, 46-2, 49-1
<b>M5.A.1.3.1</b>	Compare whole numbers through 9 digits using the words more, less, equal, least, most, greater than, less than or the symbols $<$ , $>$ , $=$ .	3	2-1
<b>M5.A.1.3.2</b>	Compare and/or order decimals through the hundredths. (Limit sets for ordering to no more than 4 numbers).	41, 42, 44, 45	21-1, 22-1, 24-1, 25-1

		<b>Student Book</b>	<b>Skill Builders</b>
<b>M5.A.1.3.3</b>	Compare proper fractions through 16ths with like and unlike denominators.	28-34, 36-38, 41, 44, 43	11-1, 11-2, 12-1, 12-2, 13-1, 21-1, 25-1, 47-2
<b>M5.A.1.4</b>	Use simple applications of negative numbers (number line, counting, temperature).		
<b>M5.A.1.4.1</b>	Locate/identify integers on a number line (greater than or equal to -20).	29	11-1
<b>M5.A.1.4.2</b>	Identify negative temperatures on a thermometer (through -20oC or oF).		
<b>M5.A.1.5</b>	Use or develop models to represent fractions and/or mixed numbers.	28-39, 41, 44	11-1, 12-1, 15-1, 21-1, 47-2
<b>M5.A.1.5.1</b>	Use or develop regions and/or sets (e.g., circle graph, base ten blocks) to model fractions and mixed numbers through hundredths (may include reducing the fractions).	28-39, 41, 44	11-1, 12-1, 15-1, 17-2, 17-3, 19-1, 21-1, 47-2
<b>M5.A.1.6</b>	Apply number theory concepts (i.e., primes, factors, multiples, composites).	7, 16, 23, 36-38	4-1, 8-2, 10-1
<b>M5.A.1.6.1</b>	Define/list/identify prime and composite numbers less than or equal to 100.	7	4-1
<b>M5.A.1.6.2</b>	Define/list/identify factors and/or multiples of a given whole number less than or equal to 50.	7	4-1
<b>M5.A.2</b>	<b>Understand the meanings of operations, use operations and understand how they relate to each other.</b>		

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<b>M5.A.2.1</b>	Solve problems involving decimals, fractions and/or whole numbers (straight computation or word problems).	3-49, 54-64	2-1, 3-1, 3-2, 4-1, 5-1, 5-2, 6-1, 7-1, 8-1 to 8-3, 9-1, 10-1 to 10-3, 11-1, 11-2, 12-1, 12-2, 13-1, 14-1, 15-1 to 15-3, 16-1, 17-1 to 17-4, 19-1, 20-1, 21-1, 22-1, 23-1, 24-1, 25-1, 26-1, 36-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 43-1, 44-1, 44-2, 45-1 to 45-5, 46-1, 46-2, 47-1, 47-2, 48-1, 49-1, 49-2, 50-1
<b>M5.A.2.1.1</b>	solve problems involving addition, subtraction, multiplication and division of whole numbers (multipliers up to 2 digits – divisors one digit) and decimals including money (answer through hundredths – no divisors with decimals).	7-26, 46-49, 54, 55, 57-62, 64	3-2, 4-1, 5-1, 5-2, 6-1, 7-1, 8-1 to 8-3, 9-1, 10-1 to 10-3, 26-1, 36-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 44-2, 45-1 to 45-5, 46-1, 46-2, 47-1, 47-2, 48-1, 49-1, 49-2, 50-1
<b>M5.A.2.1.2</b>	Solve problems involving addition and subtraction of fractions (through 16ths – like and unlike denominators – for unlike denominators, the LCD must be one of the given denominators).	33-35, 37, 38	15-1 to 15-3, 16-1, 17-1 to 17-4
<b>M5.A.2.1.3</b>	Choose the correct operation(s) to solve a problem (no more than 2 operations).	13, 14, 26, 48, 49	45-1 to 45-5
<b>M5.A.3.</b>	<b>Compute accurately and fluently and make reasonable estimates.</b>		
<b>M5.A.3.1</b>	Apply estimation strategies to a variety of problems.	4, 11-13, 18, 25, 26, 30, 49, 56-58, 61, 62	19-1, 36-1, 37-1, 45-1, 45-5, 48-1, 49-1, 49-2, 50-1
<b>M5.A.3.1.1</b>	Round whole numbers through millions and decimals through hundredths.	4-6, 11, 12, 18	3-1, 3-2, 49-1, 49-2, 50-1

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<b>M5.A.3.1.2</b>	Use estimation to solve problems involving whole numbers and/or decimals (up to 2-digit multipliers, single-digit divisors or multiples of 10; whole numbers through thousands and decimals through hundredths)	4, 11-13, 18, 25, 26, 49, 56-58, 61, 62	36-1, 37-1, 45-1, 45-5, 48-1, 49-1, 49-2, 50-1
<b>M5.A.3.2</b>	Compute accurately without the use of a calculator (straight computation or 1 operation word problems).	7-26, 30, 31, 33-39, 46-49, 55, 57-62, 64	3-2, 4-1, 5-1, 5-2, 6-1, 7-1, 8-1 to 8-3, 9-1, 10-1 to 10-3, 12-1, 12-2, 14-1, 15-1 to 15-3, 16-1, 17-1 to 17-4, 19-1, 20-1, 26-1, 38-1, 38-2, 39-1, 40-1, 41-1, 54-1, 44-2, 45-1 to 45-5, 46-1, 46-2, 47-1, 47-2, 48-1, 49-1, 49-2, 50-1
<b>M5.A.3.2.1</b>	Use addition, subtraction, multiplication and division to compute accurately without a calculator (multipliers up to 2 digits, single-digit divisors or multiples of 10 – whole numbers through thousands and decimals through hundredths – no divisors with decimals).	7-26, 30, 31, 33-39, 46-49, 55, 57-62, 64	3-2, 4-1, 5-1, 5-2, 6-1, 7-1, 8-1 to 8-3, 9-1, 10-1 to 10-3, 12-1, 12-2, 14-1, 15-1 to 15-3, 16-1, 17-1 to 17-4, 19-1, 20-1, 26-1, 36-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 44-2, 45-1 to 45-5, 46-1, 46-2, 47-1, 47-2, 48-1, 49-1, 49-2, 50-1
<b>M5.B</b>	<b>MEASUREMENT</b>		
<b>M5.B.1</b>	<b>Demonstrate an understanding of measurable attributes of objects and figures, and the units, systems and processes of measurement.</b>		
<b>M5.B.1.1</b>	Select appropriate units (customary or metric) to measure specific attributes of objects.	54, 61, 62	35-1, 41-1, 42-1
<b>M5.B.1.1.1</b>	Select the appropriate unit for measuring weight (mass), capacity, length, perimeter and area.	61, 62	41-1, 42-1

		Student Book	Skill Builders
<b>M5.B.1.2</b>	Solve problems using simple conversions and/or add and subtract measurements.	46, 55, 60-62	36-1, 40-1, 41-1, 42-1, 43-1
<b>M5.B.1.2.1</b>	Convert using linear measurements, capacity, and weight (mass) within the same system to the unit immediately above or below the given unit (using only the units below – use a conversion chart or a "hint" with problems e.g., hint: 16 oz = 1 lb).	55, 61, 62	36-1, 40-1, 41-1, 42-1, 43-1
•	Metric using mm, cm, m and km; mL and L; g and kg		41-1, 42-1
•	Customary using cup, pint, quart, gallon; in, ft, yd; oz, lb	55, 61, 62	36-1
<b>M5.B.1.2.2</b>	Add or subtract linear measurements, (feet and inches) or units of time (hours and minutes), without having to regroup with subtraction (answer should be in simplest form).	46, 60	40-1
<b>M5.B.1.3</b>	Estimate and/or compare the perimeters or areas of 2 figures without computation.	53, 57, 58	38-1
<b>M5.B.1.3.1</b>	Estimate which polygon (shown on a grid) has a greater perimeter or area (compare either area to area or perimeter to perimeter).	57, 58	38-1
<b>M5.B.1.3.2</b>	Estimate the area of an irregular figures shown on a grid.	58	
<b>M5.B.2</b>	<b>Apply appropriate techniques, tools and formulas to determine measurements.</b>		
<b>M5.B.2.1</b>	Use appropriate tools to determine measurements.	28, 29, 40, 54-62	11-1, 35-1, 36-1, 37-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 43-1, 46-1
<b>M5.B.2.1.1</b>	Use a ruler to measure to the nearest 1/8 inch or centimeter.		
<b>M5.B.2.2</b>	Solve problems involving length, time, weight (mass), capacity, temperature, perimeter and/or area.	54-62	35-1, 36-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 46-1
<b>M5.B.2.2.1</b>	Find the perimeter of a figure drawn and labeled (with the same units throughout).	57-59	38-1
<b>M5.B.2.2.2</b>	Find the area of a square or rectangle (with the same units throughout– whole numbers only).	58, 59	38-2, 39-1

		<b>Student Book</b>	<b>Skill Builders</b>
<b>M5.B.2.2.3</b>	Solve problems involving weight, time, temperature, length and capacity (with the same units throughout – limited to 3 digits).	48, 49, 54-62	35-1, 36-1, 38-1, 38-2, 39-1, 40-1, 41-1, 42-1, 45-3 to 45-5, 46-1
<b>M5.C</b>	<b>GEOMETRY</b>		
<b>M5.C.1</b>	<b>Analyze characteristics and properties of two- and three-dimensional geometric shapes and demonstrate understanding of geometric relationships.</b>		
<b>M5.C.1.1</b>	Define and/or use basic properties of quadrilaterals (parallelograms, squares, rectangles, trapezoids, rhombi), triangles, circles, pyramids, cubes, and/or prisms.	53, 54, 57-59	32-2, 34-1, 35-1, 38-1, 38-2, 39-1
<b>M5.C.1.1.1</b>	Identify, and/or classify cubes, rectangular prisms or pyramids using faces, vertices and edges.		34-1
<b>M5.C.1.1.2</b>	Identify and/or describe properties of all types of quadrilaterals (parallelogram, rectangle, rhombus, square, trapezoid).	53, 57, 58	34-1, 38-1, 38-2, 39-1
<b>M5.C.1.2</b>	Represent and/or use properties of lines, line segments, rays, points and planes.	29, 46, 50, 52	11-1, 31-1, 32-1, 44-2, 48-1
<b>M5.C.1.2.1</b>	Identify, draw and/or label points, lines, line segments and rays.	29, 46, 50, 52	11-1, 31-1, 32-1, 44-2, 48-1
<b>M5.C.2</b>	<b>Identify and/or apply concepts of transformations or symmetry.</b>		
<b>M5.C.2.1</b>	Analyze transformations and/or use symmetry to analyze mathematical situations.		32-2
<b>M5.C.2.1.1</b>	Draw or identify a translation (slide), reflection (flip) or rotation (turn) of a 2-dimensional shape.		32-2
<b>M5.C.2.1.2</b>	Identify the number of lines of symmetry and/or draw all lines of symmetry in a two-dimensional polygon.		
<b>M5.C.3</b>	<b>Locate points or describe relationships using the coordinate plane.</b>		44-2
	Not assessed at Grade 5.		
<b>M5.D</b>	<b>ALGEBRAIC CONCEPTS</b>		

		Student Book	Skill Builders
<b>M5.D.1</b>	<b>Demonstrate an understanding of patterns, relations and functions.</b>		
<b>M5.D.1.1</b>	Create or extend patterns.	2, 15, 16, 18, 30, 33, 55, 61	24-1, 44-1
<b>M5.D.1.1.1</b>	Extend or find a missing element in a numerical or simple geometric pattern (+, -, x, or ÷ of whole numbers ). Patterns must show 3 repetitions.	2, 15, 16, 18, 30, 33, 55, 61	24-1, 44-1
<b>M5.D.1.1.2</b>	Create or replicate a numerical or geometric pattern showing 3 repetitions of that pattern (+, -, x or ÷ of whole numbers may be used).	27, 34	3-2, 15-2, 15-3, 20-1, 24-1, 44-1
<b>M5.D.1.2</b>	Analyze patterns.	2, 4, 8-10, 16-18, 27, 30, 31, 33, 34, 36	3-2, 8-2
<b>M5.D.1.2.1</b>	Form a rule based on a given pattern, or illustrate a pattern based on a given rule (., -, x or÷ of whole numbers may be used). Patterns must show 3 repetitions.	2, 4, 8-10, 15-18, 27, 28, 30, 31, 33, 34, 36, 55, 61	3-2, 8-2, 15-2, 15-3, 20-1
<b>M5.D.2</b>	<b>Represent and/or analyze mathematical situations using numbers, symbols, words, tables and/or graphs.</b>		
<b>M5.D.2.1</b>	Select and/or use appropriate strategies, including concrete materials, to solve or represent expressions or number sentences.	3, 5-21, 23-26, 30-39, 44, 46-49, 55, 57-62, 64	2-1, 3-1, 3-2, 5-1, 5-2, 8-2, 9-1, 10-1, 10-3, 12-1, 12-2, 13-1, 14-1, 15-1 to 15-3, 17-1 to 17-4, 19-1, 20-1, 24-1, 25-1, 26-1, 39-1, 45-1 to 45-5, 46-2
<b>M5.D.2.1.1</b>	Solve for a missing number (blank, question mark, variable) in a equation involving a single operation whole numbers only.	8, 14, 55, 60-62	3-2, 5-1, 5-2, 14-1, 36-1, 40-1, 41-1, 42-1, 43-1, 44-1, 44-2, 47-2, 50-1
<b>M5.D.2.1.2</b>	Match a realistic situation to an equation, expression, inequality (<, >, =), table or graph (variable must be isolated, e.g., $17 + 39 = n$ ).	3, 5-26, 30, 32-40, 44, 46-49, 55, 57-64	14-1, 16-1, 17-3, 19-1, 20-1, 24-1, 26-1, 35-1, 36-1, 40-, 41-1, 42-1, 45-1 to 45-5, 46-2, 47-1, 47-2, 48-1, 50-1

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<b>M5.D.3</b>	<b>Analyze change in various contexts.</b>	31, 34-38, 45, 55, 60-62	12-2, 14-1, 16-1, 17-1 to 17-4, 25-1, 36-1, 40-1, 41-1, 42-1, 47-2, 48-1
	Not assessed at Grade 5.		
<b>M5.D.4</b>	<b>Describe or use models to represent quantitative relationships.</b>	1-10, 13, 15-20, 23, 25-34, 36-48, 57-64	3-1, 9-1, 10-1, 10-3, 11-1, 12-1, 15-1, 21-1, 23-1, 38-1, 38-2, 39-1, 41-1, 42-1, 44-2, 47-2, 48-1, 49-1
	Not assessed at Grade 5.		
<b>M5.E</b>	<b>DATA ANALYSIS AND PROBABILITY</b>		
<b>M5.E.1</b>	<b>Formulate or answer questions that can be addressed with data and/or organize, display, interpret or analyze data.</b>		
<b>M5.E.1.1</b>	Organize, display and/or interpret data using pictographs, tallies, tables, charts, line, bar graphs.	1-3, 5, 6, 11, 18, 22, 23, 26-31, 36, 37, 41, 46, 47, 55, 60-64	3-1, 4-1, 11-1, 44-2, 47-1, 47-2
<b>M5.E.1.1.1</b>	Display and/or interpret data shown in tallies, tables, charts, pictographs, bar graphs, line graphs and using a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs.	1-3, 5, 6, 11, 18, 22, 23, 28-31, 41, 46, 60, 62-64	3-1, 4-1, 11-1, 44-2, 47-1, 47-2
<b>M5.E.2</b>	<b>Select and/or use appropriate statistical methods to analyze data.</b>		
<b>M5.E.2.1</b>	Describe data sets using mean, median, mode and/or range.	21, 22	46-1, 46-2, 48-1
<b>M5.E.2.1.1</b>	Determine the mean/average (answer is a whole number), median (answer is a whole number or average of 2 numbers) and range of data (up to 10 numbers).	21 22	46-1, 46-2, 48-1
<b>M5.E.2.1.2</b>	Identify the mode in a set of data (up to 10 numbers).	22	
<b>M5.E.3</b>	<b>Understand and/or apply basic concepts of probability or outcomes.</b>		



		<b>Student Book</b>	<b>Skill Builders</b>
<b>M5.E.3.1</b>	Predict or determine all possible combinations, outcomes and/or calculate the probability of a simple event.		47-2
<b>M5.E.3.1.1</b>	Predict or determine whether some outcomes are certain more likely, less likely, equally likely, or impossible (information could be represented by pictographs, bar graphs, charts, tables and/or spinners).		47-2
<b>M5.E.3.1.2</b>	Determine the probability of an outcome (e.g., a coin toss, a roll of a number cube) and express as a fraction without reduction.		47-2
<b>M5.E.4</b>	<b>Develop and/or evaluate inferences and predictions or draw conclusions based on data or data displays.</b>	3, 5, 6, 18, 22, 27, 60, 63, 64	3-1, 4-1, 44-2, 47-1, 47-2
	Not assessed at Grade 5.		