



Math Teachers Press, Inc.

4850 Park Glen Road, Minneapolis, MN 55416
 phone (800) 852-2435 fax (952) 546-7502

Dec. 05

LOUISIANA GRADE LEVEL EXPECTATIONS GRADE 7 TO MOVING WITH MATH® MATH-BY-TOPIC FOR MIDDLE HIGH (MH)

	MH1 <i>Number, Data Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
NUMBER AND NUMBER RELATIONS					
1. Recognize and compute equivalent representations of fractions, decimals, and percents (i.e., halves, thirds, fourths, fifths, eighths, tenths, hundredths) (N-1-M)		2, 3, 43, 50-55, 77 SB: 11-4, 2-1 to 20-3	6-14, 19 SB: 25-1 to 25-4		
2. Compare positive fractions, decimals, percents, and integers using symbols (i.e., $<$, \leq , $=$, \geq , $>$) and position on a number line (N-2-M)	3 SB: 4-4	4-6, 9, 11, 43, 44, 46, 47 SB: 11-1, 11-2, 18-4	14, 20		
3. Solve order of operations problems involving grouping symbols and multiple operations (N-4-M)	11, 12, 14-16, 25, 26 SB: 2-1, 2-2, 59-1, 59-2, 69-1				51, 52 SB: 59-1, 59-5, 59-6
4. Model and apply the distributive property in real-life applications (N-4-M)	12 SB: 2-2				49, 50 SB: 59-1, 59-5

		MH1 <i>Number, Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
5.	Multiply and divide positive fractions and decimals (N-5-M)		8, 10, 24, 26-32, 59-66, 70 SB: 2-1, 12-1, 12-2, 14-1, 14-2, 15-1, 15-2, 16-1, 17-1, 17-2, 22-1, 22-2, 23-1 to 23-3, 24-1	28-30, 33, 35-45, 47, 48, 51 SB: 27-1 27-3 to 27-5, 28-1 to 28-8, 43-1, 43-2, 51-1		30, 31 SB: 58-7
6.	Set up and solve simple percent problems using various strategies, including mental math (N-5-M) (N-6-M) (N-8-M)			45-54 SB: 28-5, 43-3, 43-4, 51-1 to 511-3		
7.	Select and discuss appropriate operations and solve single- and multi-step, real-life problems involving positive fractions, percents, mixed number, decimals, and positive and negative integers (N-5-M) (N-3-M) (N-4-M)	41, 45-49, 52-54 SB: 43-2, 43-3 43-5 to 43-11, 43-13	23, 25, 33, 36, 54, 57, 58, 67, 73 SB: 17-3	17, 33-44, 47, 48 SB: 27-4, 28-1 to 28-8, 43-1, 43-2		28
8	Determine the reasonableness of answers involving positive fractions and decimals by comparing them to estimates (N-6-M) (N-7-M)	47	21-23, 34, 35, 71, 72, 74 SB: 43-1, 43-2, 44-1	31, 32, 59 SB: 44-2, 44-3		
9.	Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using decimals and percents (N-7-M) (N-5-M)		21-23, 71, 72, 74	31, 32 SB: 44-2, 44-3		

		MH1 <i>Number, Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
10.	Determine and apply rates and ratios (N-8-M)		37, 68, 69 SB: 46-1, 46-2	21-23, 26, 46, 61 SB: 26-1, 43-3, 51-2, 51-3	26, 27, 31, 32, 59, 77 SB: 46-3, 64-1	
11.	Use proportions involving whole numbers to solve real-life problems (N-8-M)		22, 23, 37, 38 SB: 46-2	24, 25, 27, 49, 52, 53 SB: 26-2, 43-3, 46-1	28 SB: 46-1	
	ALGEBRA					
12.	Evaluate algebraic expressions containing exponents (especially 2 and 3) and square roots, using substitution (A-1-M)	22-26 SB: 6-1, 54-1, 54-2, 69-1				70-74 SB: 61-1, 61-2, 61-4
13.	Determine the square root of perfect squares and mentally approximate other square roots by identifying the two whole numbers between which they fall (A-1-M)	23, 24 SB: 54-1, 54-2			33 SB: 54-1	
14.	Write a real-life meaning of a simple algebraic equation or inequality, and vice versa (A-1-M) (A-5-M)	17 SB: 59-3				32-35, 43, 44, 53, 65, 66 SB: 1-1, 50-1, 60-2
15.	Match algebraic inequalities with equivalent verbal statements and vice versa (A-1-M)	17, 18 SB: 59-3, 59-4				53, 55

	MH1 <i>Number, Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
16. Solve one- and two-step equations and inequalities (with one variable) in multiple ways (A-2-M0)					46, 47, 54, 55, 57-59, 65 SB: 50-4, 50-5, 59-2, 60-2
17. Graph solutions sets of one-step equations and inequalities as points, or open and closed rays on a number line (e.g., $x = 5$, $x < 5$, $x \leq 5$, $x > 5$, $x \geq 5$) (A-2-M)					4, 5, 48, 53-57 SB: 48-1, 48-2, 50-6
18. Describe linear, multiplicative, or changing growth relationships (e.g., 1, 3, 6, 10, 15, 21, ...) verbally and algebraically (A-3-M) (A-4-M) (P-1-M)	31-33 SB: 42-2, 42-4				61-64, 69 SB: 60-1, 60-4, 60-5
19. Use <i>function machines</i> to determine and describe the rule that generates outputs from given inputs (A-4-M) (P-3-M)					60-64 SB: 60-1
20. Determine the perimeter and area of composite plane figures by subdivision and area addition (M-1-M) (G-7-M)				70	

	MH1 <i>Number, Data Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
21. Compare and order measurements within and between the U.S. and metric systems in terms of common reference points (e.g., weight/mass and area) (M-4-M) (G-1-M)				43, 47-50, 54, 55 SB: 34-2, 37-2	
22. Convert between units of area in U.S. and metric units within the same system (M-5-M)				49, 50, 54, 55 SB: 37-2	
23. Demonstrate an intuitive sense of comparisons between degrees Fahrenheit and Celsius in real-life situations using common reference points (M-5-MO)				42 SB: 34-4	
GEOMETRY					
24. Identify and draw angles (using protractors), circles, diameters, radii, altitudes, and 2-dimensional figures with given specifications (G-2-M)			57	2, 3, 5, 6, 8-10, 13, 17, 18 SB: 29-1, 29-2, 30-2, 31-1 to 31-3, 32-3, 32-5, 33-1	
25. Draw the results of reflections and translations of geometric shapes on a coordinate grid (G-3-M)				11, 14-16 SB: 32-1, 32-4	

	MH1 <i>Number, Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
26. Recognize π as the ratio between the circumference and diameter of any circle (i.e., $\pi = C/d$ or $\pi = C/2r$) (G-5-M)				63, 68 SB: 39-1, 56-1	
27. Model and explain the relationship between perimeter and area (how scale change in a linear dimension affects perimeter and area) and between circumference and area of a circle (G-5-M)				63, 68 SB: 39-1, 56-1	
28. Determine the radius, diameter, circumference, and area of a circle and apply these measures in real-life problems (G-5-M) (G-7-M) (M-6-M)				63, 68 SB: 39-1, 56-1	
29. Plot points on a coordinate grid in all 4 quadrants and locate the coordinates of a missing vertex in a parallelogram (G-6-M) (A-5-M)				11, 19, 22, 23, 69 SB: 32-1, 33-2, 52-3	11, 12 SB: 49-1, 49-2
30. Apply the knowledge that the measures of the interior angles in a triangle add up to 180 degrees (G-7-M)				7, 20, 21 SB: 52-2	
DATA ANALYSIS, PROBABILITY, AND DISCRETE MATH					

	MH1 <i>Number, Data Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
31. Analyze and interpret circle graphs, and determine when a circle graph is the most appropriate type of graph to use (D-2-M)			55, 56, 58 SB: 68-2, 68-3		
32. Describe data in terms of patterns, clustered data, gaps, and outliers (D-2-M)	55-60, 63-65, 67, 70-74 SB: 45-1 to 45-6, 67-1 to 67-4, 68-3, 68-6	75, 76 SB: 45-1			
33. Analyze discrete and continuous data in real-life applications (D-2-M) (D-6-M)	70, 75, 76				
34. Create and use Venn diagrams with three overlapping categories to solve counting logic problems (D-3-M)					
35. Use informal thinking procedures of elementary logic involving <i>if/then</i> statements (D-3-M)					
36. Apply the fundamental counting principle in real-life situations (D-4-M)			75, 76 SB: 66-2		
37. Determine probability from experiments and from data displayed in tables and graphs (D-5-M)			63, 66, 74 SB: 47-1, 47-2, 47-6		

		MH1 <i>Number, Reasoning, Data</i> Student Book Skill Builders (SB)	MH2 <i>Fractions, Decimals</i> Student Book Skill Builders (SB)	MH3 <i>Percent, Probability</i> Student Book Skill Builders (SB)	MH4 <i>Geometry, Measurement</i> Student Book Skill Builders (SB)	MH5 <i>Algebra</i> Student Book Skill Builders (SB)
38.	Compare theoretical and experimental probability in real-life situations (D-5-M)			61-77 SB: 47-1 to 47-6, 66-1, 66-2		
	PATTERNS, RELATIONS, AND FUNCTIONS					
39.	Analyze and describe simple exponential number patterns (e.g., 3, 9, 27 or $3^1, 3^2, 3^3$) (P-4-M)	22, 32 SB: 6-1	6			
40.	Analyze and verbally describe real-life additive and multiplicative patterns involving fractions and integers (P-1-M) (P-4-M)	31-34 SB: 42-2				
41.	Illustrate patterns of change in length(s) of sides and corresponding changes in areas of polygons (P-3-M)				60-62, 64-67 SB: 38-1, 55-1, 55-2	