

MAP Prep Grade 6 Mathematics Second Edition

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	Table of Contents					
MAP Grade Level Expectations 2.0-Grade 6 Mathematics						
Number and Operations						
1.	Understand numbers, ways of representing numbers, relationships among numbers and number systems.	Pages 1–17				
1A:	Apply and understand whole numbers to millions, fractions and decimals to the thousandths (including location on the number line).	Problems 1–53				
1B:	Recognize and generate equivalent forms of fractions, decimals and benchmark percents.	Problems 54–132				
1C:	*Recognize equivalent representations for the same number and generate them by decomposing and composing numbers.	Not Tested				
2.	Understand meanings of operations and how they relate to one another.	Pages 18–29				
2B:	Describe the effects of multiplication and division on fractions and decimals.	Problems 133–209				
2C:	*Apply properties of operations (including order of operations) to positive rational numbers.	Not Tested				
2D:	Identify square and cubic numbers and determine whole number roots and cubes.	Problems 210–240				
3.	Compute fluently and make reasonable estimates.	Pages 30–38				
3C:	Multiply and divide positive rational numbers.	Problems 241–274				
3D:	* Estimate and justify the results of multiplication and division of positive rational numbers.	Not Tested				
3E:	Solve problems using ratios and rates.	Problems 275–302				

Algebraic Relationships					
1.	Understand patterns, relations and functions.	Pages 39–50			
1B:	Represent and describe patterns with tables, graphs, pictures, symbolic rules or words.	Problems 313–332			
1C:	*Compare various forms of representations to identify patterns.	Not Tested			
1D:	*Identify functions as linear or nonlinear from tables or graphs.	Not Tested			
2.	Represent and analyze mathematical situations and structures using algebraic symbols.	Pages 51–61			
2A:	Use symbolic algebra to represent unknown quantities in expressions or equations and solve one-step equations.	Problems 333–385			
2B:	Use the commutative, distributive and associative properties to generate equivalent forms for simple algebraic expressions.				
3.	Use mathematical models to represent and understand quantitative relationships.	Pages 62–64			
3A:	Model and solve problems, using multiple representations such as tables, expressions and one-step equations.	Problems 399–408			
4. *Analyze change in various contexts.					
4A:	*Construct and analyze representations to compare situations with constant or varying rates of change.	Not Tested			
Geo	metric and Spatial Relationships	Pages 65–85			
1.	Analyze characteristics and properties of two- and three- dimensional geometric shapes and develop mathematical arguments about geometric relationships.	Pages 65–69			
1A:	Identify similar and congruent shapes.	Problems 409–418			
2.	Specify locations and describe spatial relationships using coordinate geometry and other representational systems.	Pages 70–77			
2A:	Use coordinate systems to construct geometric shapes.	Problems 419–427			

3.	3. *Apply transformations and use symmetry to analyze mathematical situations.				
3A:	* Describe the transformation from a given pre-image using the terms reflection/flip, rotation/turn, and translation/slide.	Not Tested			
3C:	*Create polygons and designs with rotational symmetry.	Not Tested			
4.	Use visualization, spatial reasoning and geometric modeling to solve problems.	Pages 78–85			
4A:	*Use spatial visualization to identify isometric representations of mat plans.	Not Tested			
4B:	Draw or use visual models to represent and solve problems.	Problems 428–437			
Measurement					
1.	Understand measurable attributes of objects and the units, systems and processes of measurement.	Pages 86–87			
1A:	Identify and justify the unit of measure for area and volume (customary and metric).	Problems 438–445			
1C:	*Solve problems involving elapsed time (hours and minutes).	Not Tested			
2.	Apply appropriate techniques, tools and formulas to determine measurements.	Pages 88–94			
2B:	*Identify and justify an angle as acute, obtuse, straight, or right.	Not Tested			
2C:	Solve problems involving the area or perimeter of polygons.	Problems 446–457			
2E:	Convert from one unit to another within a system of measurement (mass and weight).	Problems 458–475			

Data and Probability						
1.	Formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.					
1A:	Formulate questions, design studies and collect data about a characteristic.					
1C:	Interpret circle graphs; create and interpret stem-and-leaf plots.					
2.	Select and use appropriate statistical methods to analyze data.	Pages 103–107				
2A:	Find the range and measures of center, including median, mode and mean.	Problems 498–512				
3.	Develop and evaluate inferences and predictions that are based on data.	Page 108				
3A:	Use observations about differences between 2 samples to make conjectures about the populations from which the samples were taken.	Problem 513				
4.	Understand and apply basic concepts of probability.	Pages 109–113				
4A:	Use a model (diagrams, list, sample space, or area model) to illustrate the possible outcomes of an event.	Problems 514–518				
	About the Practice Tests	Page 115				
	Practice Test 1	T1				
	Practice Test 2	T45				

Number and Operations - 1A

Identify the place values of the underlined digits.

1. $\underline{3}, 246, 185.460$

- a. thousands
- b. ten-thousands
- c. hundred-thousands
- d. millions
- 2. 735,951.169
 - a. thousands
 - b. ten-thousandths
 - c. hundredths
 - d. thousandths
- 3. 17,<u>6</u>18,523.82
 - a. ten-millions
 - b. millions
 - c. hundred-thousands
 - d. thousands

4. 2,971.879

- a. ones
- b. tens
- c. hundredths
- d. tenths

- 5. 3,8<u>5</u>6,723
 - a. thousands
 - b. ten-thousands
 - c. hundred-thousands
 - d. millions
- 6. 989,856.1<u>9</u>5
 - a. thousands
 - b. tenths
 - c. hundredths
 - d. thousandths
- 7. 2,634,107.38
 - a. ten-millions
 - b. millions
 - c. hundred-thousands
 - d. thousands
- 8. 78,651.67<u>2</u>
 - a. thousands
 - b. tenths
 - c. hundredths
 - d. thousandths

Number and Operations - 1B

Express the following fractions as percents. Round your answers to the nearest tenth of a percent.	Express the following fractions as decimal numbers. Round your answers to the nearest thousandth.
62. 62/100 =	70. 10/36 =
63. 19/20 =	71. 16/42 =
64. 8/45 =	72. 11/24 =
65. 7/21 =	73. 2 50/125 =
Express the following decimal numbers as fractions. Reduce the fractions to their lowest common denominator.	Express the following percents as fractions. Reduce the fractions to their lowest common denominator.
66188 =	74. 81% =
67560 =	75. 38% =
68425 =	76. 125% =
69. 1.270 =	77. 67.5% =

Number and O	perations – 2B
Multiply the following.	Multiply the following.
182. 3 1/8 x 4 1/6 =	188. 5/6 x 3/10 =
183. 1 7/8 x 6 8/15 =	189. 2/15 x 7/10 =
184. 10 11/6 x 8 5/9 =	190. 8/9 x 15/16 =
Divide the following.	Divide the following.
185. 7 7/9 ÷ 2 3/16 =	191. $4/5 \div 21/25 =$
186. 9 1/6 ÷ 4 11/30 =	192. $6/7 \div 12/28 =$
187. 5 5/12 ÷ 5 5/18 =	193. $15/22 \div 10/33 =$

Number and Op	perations - 3E
 293. Cindy collects baseball cards and hockey cards. For every hockey card Cindy has, she has five baseball cards. If Cindy has 840 total cards in her collection, how many of those cards would be baseball cards? a. 600 cards b. 640 cards c. 700 cards d. 750 cards 	 295. Andy is the center for his school's basketball team. He scores three points for his team for every five minutes that he plays. If Andy played 35 minutes in his last game, how many points would he most likely have scored? a. 12 points b. 15 points c. 21 points d. 35 points
 294. Nick purchased a box of 425 thumbtacks. The box contained green thumbtacks and yellow thumbtacks. The number of green thumbtacks to the number of yellow thumbtacks was in the ratio of seven to ten. How many yellow thumbtacks were in this box? a. 125 b. 175 c. 200 d. 250 	A recipe that yields 36 cookies uses 4.5 cups of flour and 1.25 cups of sugar. How many cups of flour and sugar would be needed if this recipe were to yield 54 cookies? 296. flour: cups 297. sugar: cups

Algebraic Relationships – 1B

Heather grew a plant for a school science project. For 24 days, she recorded the growth of the plant. Her results are shown in the table below.

Plant Growth									
Time (in Days)	0	3	6	9	12	15	18	21	24
Height (in Centimeters)	0	0.9	1.8	2.7	3.6	4.5	5.4	6.3	7.2

315. Draw a sketch of a graph to display Heather's data in the space below.

316. Describe the rate of growth of Heather's plant over this 24-day period.



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431. On the above grid, draw a rectangle. On the same grid, draw a figure that is similar to that first rectangle, but with dimensions 50% smaller.

432. What would be the relationship of the perimeters of these two figures?

Tanya teaches an aerobics class Tuesday mornings at the local gym. Listed below are the ages of the people in her class.

31, 33, 28, 51, 44, 37, 48, 40, 29, 30,36, 34, 29, 52, 50, 43, 47, 41, 27, 38

491. Create a stem-and-leaf plot that would reflect this information.

These practice tests are designed to prepare students for the Grade 6 Missouri Assessment Program (MAP) mathematics test. They contain problems dealing with number and operations, geometric and spatial relationships, measurement, data and probability, and algebraic relationships. The problems included in these tests are chosen to best represent those that will appear on the actual Grade 6 MAP mathematics test.

To simulate the test-taking experience, each part of the practice tests will be timed. Answers to the selected-response problems will be filled in by the students on the answer grids located on page T44 for Practice Test 1, and on page T89 for Practice Test 2.

