

Grade 4 Mathematics MCA-III Achievement Level Descriptors

Number and Operation		Algebra	
499	Meets State Standard	499	Meets State Standard
466		466	
450		450	
440		440	
401		401	
Meets State Standard		Meets State Standard	
499	Meets State Standard	499	Meets State Standard
466		466	
450		450	
440		440	
401		401	
Meets State Standard		Meets State Standard	
499	Meets State Standard	499	Meets State Standard
466		466	
450		450	
440		440	
401		401	
Meets State Standard		Meets State Standard	
499	Meets State Standard	499	Meets State Standard
466		466	
450		450	
440		440	
401		401	
Meets State Standard		Meets State Standard	
499	Does Not Meet State Standard	499	Does Not Meet State Standard
466		466	
450		450	
440		440	
401		401	
Does Not Meet State Standard		Does Not Meet State Standard	

Number and Operation

Algebra

Exceeds the Standard Chooses correct operation in a problem solving situation; uses various strategies to solve multi-step problems and assess the reasonableness of results; develops a rule for addition and subtraction of fractions with common denominators; compares and orders decimals to the thousandths.

Meets the Standard Knows division facts; multiplies multi-digit numbers; solves multiplication problems when all relevant information is present and the question is clearly defined; solves division problems by solving for missing factor; connects relationship between multiplication and division; solves multi-step problems involving addition and subtraction; uses fraction models to determine equivalent fractions; reads and writes decimals up to thousandths.

Partially Meets the Standard Knows basic multiplication facts and recognizes some division facts; knows decimal and fraction equivalents for halves and fourths; uses models to compute with fractions.

Does Not Meet the Standard : Partial recall of basic multiplication facts; computes inefficiently (e.g., uses repeated addition instead of multiplication); uses models to represent fractions.

Exceeds the Standard Uses multi-step rules for patterns presented in different formats; translates between real-world situations and number sentences.

Meets the Standard Uses a verbal rule for input-output table; recognizes an algebraic rule for a one-operation pattern; represents real-world situations with a number sentence involving an unknown.

Partially Meets the Standard Uses a verbal rule to continue pattern; matches number sentences with an isolated unknown in situations involving only multiplication.

Does Not Meet the Standard Recognizes patterns in lists of numbers.

Geometry & Measurement

Data Analysis & Probability

Exceeds the Standard Names and classifies polygons in a variety of contexts and orientations; conceptual understanding that polygons can be described using sides AND/OR angles; calculates area by decomposing shapes into rectangles; applies transformations to shapes; conceptual understanding of congruency (reference MN Academic Standards 4.3.3.4).

Meets the Standard Names and describes triangles and common quadrilaterals using definitions; classifies angles in a variety of orientations; conceptual understanding of area as length times width; identifies a transformation (reference MN Academic Standards 4.3.3).

Partially Meets the Standard Names and describes polygons based on a familiar pictorial orientation using solely one attribute; identifies lines of symmetry; recognizes congruent shapes with the same orientation; calculates perimeter when all sides of a graphic are labeled.

Does Not Meet the Standard Names familiar polygons (e.g., pattern blocks); classifies angles in a familiar orientation (e.g., one ray is horizontal).

Exceeds the Standard Conceptual understanding of solving problems involving data displays, including timelines and Venn diagrams

Meets the Standard Collects, organizes, and displays data; solves problems in data displays involving fractions.

Partially Meets the Standard Translates between tables and bar graphs.

Does Not Meet the Standard Displays data from a table in a bar graph