

Content Standard	MAFS.5.OA Operations and Algebraic Thinking MAFS.5.OA.1 Write and interpret numerical expressions. MAFS.5.OA.1.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8 and 7, then multiply by 2" as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.		
Assessment Limits	Whole numbers only. Simple fraction expressions. Do not use nested parentheses. Use numeric expressions only. Multiplication cross symbol is the only acceptable symbol for multiplication. Do not use the c-dot. When grouping symbols are part of the expression, the associative property or distributive property should be found in that expression.		
Calculator	No		
Acceptable Response Mechanisms	Equation Response Multiple Choice Response Natural Language Response		
Context	No context		
Example			
Context	Use 4 numbers with expressions that do not require grouping (Multiply 3 and 4, then add 5). Use 3 numbers with expressions that require grouping (Add 3 and 4, then multiply by 5).		
Context easier	Use only 3 numbers. Use direct words for the operations (add, subtract, multiply, divide, plus, minus, times). Use only whole numbers. Expressions that do not require grouping.		
Context more difficult	Use 5 numbers with expressions that do not require grouping ("Multiply 3 and 4, then add 5"). Use 4 numbers with expressions that require grouping (Add 3 and 4, then multiply by 5). Use indirect words for the operations (double, triple, sum, product) Include a fraction.		
Sample Item Stem		Response Mechanism	Notes, Comments
An expression is described in words. Divide 10 by 2, then subtract 3. Create the expression using numbers and symbols.		Equation Response	

An expression is described in words. Subtract 6 from 9, then divide by 3. Create the expression using numbers and symbols.	Equation Response	
An expression is described in words. Add 5 and 14, triple the sum, and then add four-fifths. Create the expression using numbers and symbols.	Equation Response	
An expression is shown. $18 + \frac{1}{2}(9 - 4)$ Which statement describes this expression? A. Half the difference of 9 and 4 added to 18 B. Subtract half the quantity of 9 and 4 from 18 C. The sum of 18 and half the product of 9 and 4 D. Half of 9 added to 18 minus 4	Multiple Choice Response	
An expression is shown. $3 \times 4 \times 5 - 5 + 3$ Which statement describes this expression? A. Three more than 5 subtracted from the sum of 3, 4, and 5 B. The product of 3, 4, and 5 subtracted from 5 plus 3 C. Multiply 3, 4, and 5, then subtract 5 and add 3. D. Three added to 5, then subtracted from the product of 3, 4, and 5	Multiple Choice Response	