

 Task Model 1a Prompt Features: The student is prompted to select a numerical expression, which includes up to one set of non-nester grouping symbols, that represents a calculation expressed with words. Stimulus Guidelines: Expressions use whole numbers. Expressions may include up to 4-digit dividends and 2-digit divisors for division. Expressions may include single- or multi-digit numbers for addition, subtraction, and multiplication. Expression does or does not contain grouping symbols. (Expression may include up to one set or grouping symbols.)
Response Type: Multiple Choice, single correct responsegrouping symbols, that represents a calculation expressed with words.DOK Level 1Stimulus Guidelines: • Expressions use whole numbers. • Expressions may include up to 4-digit dividends and 2- digit divisors for division. • Expressions may include single- or multi-digit numbers for addition, subtraction, and multiplication. • Expression does or does not contain grouping symbols. (Expression may include up to one set o grouping symbols.)
Multiple Choice, single correct responsewords.DOK Level 1Stimulus Guidelines: • Expressions use whole numbers. • Expressions may include up to 4-digit dividends and 2- digit divisors for division. • Expressions may include single- or multi-digit numbers for addition, subtraction, and multiplication. • Item difficulty may be adjusted via this example method • Expression does or does not contain grouping symbols. (Expression may include up to one set o grouping symbols.)
 Multiple Choice, single correct response DOK Level 1 S.OA.A.2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, Words. Stimulus Guidelines: Expressions use whole numbers. Expressions use whole numbers. Expressions use whole numbers. Expressions may include up to 4-digit dividends and 2- digit divisors for division. Expressions may include single- or multi-digit numbers for addition, subtraction, and multiplication. Item difficulty may be adjusted via this example method o Expression does or does not contain grouping symbols. (Expression may include up to one set o grouping symbols.)
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numerical expressions grouping symbols.) without evaluating them. <i>For example,</i>
without evaluating them. For example,
them. For example,
avarage the calculation ITM1.
express the calculation TM1a
"add 8 and 7, then Stimulus: The student is presented with a verbal expression the
multiply by $2''$ as $2 \times (8)$ represents a calculation with up to one set of grouping symbols.
+ 7). Recognize that 3
\times (18932 + 921) is Example Stem: Which expression correctly shows "12 times th
three times as large as sum of 5 and 7"?
· · · · · · · · · · · · · · · · · · ·
18932 + 921, without
having to calculate the A. $12 \times 5 + 7$
indicated sum or B. $5 + 7 \times 12$
<i>product.</i> C. 12 × (5 + 7)
D. 5 + (7 × 12)
Evidence Required:
1. The student writes or Rubric: (1 point) The student selects the correct expression
identifies a numerical (e.g., C).
expression that records
a calculation Response Type: Multiple Choice, single correct response
represented with words.
represented with words.
Tools: None
Version 2 undates
Version 3 update:
Revised example stem
TM1a from an
equation/numeric to a
multiple choice response
type because the
response type for this
task model presented
both authoring and
scoring challenges
during initial field-
testing. Retired TM1b
for the same reason as
stated above.



Task Model 1c	Prompt Features: The student is prompted to select a
TASK MODELIC	• •
Deenenee Tumer	numerical expression, which includes two sets of non-nested
Response Type:	grouping symbols, that represents a calculation expressed with
Multiple Choice,	words.
single correct	
response	Stimulus Guidelines:
	 Expressions may include up to 4-digit dividends and 2-
DOK Level 1	digit divisors for division.
	• Expressions may include single- or multi-digit numbers for
5.0A.A.2	addition, subtraction, and multiplication.
Write simple	 Item difficulty may be adjusted via these example
	methods:
expressions that record	
calculations with	 Expression contains one or two operations outside
numbers, and interpret	the grouping symbols.
numerical expressions	\circ Expression contains whole numbers, fractions, or
without evaluating	decimals.
them. <i>For example,</i>	 Fractions must have a denominator of 2, 3,
express the calculation	4, 5, 6, 8, 10, 12, or 100.
"add 8 and 7, then	 Addition and subtraction of fractions may
multiply by $2''$ as $2 \times (8)$	include mixed numbers and fractions
+ 7). Recognize that 3	without common denominators.
\times (18932 + 921) is	 Division of fractions is limited to whole
three times as large as	number by unit fraction or unit fraction by
18932 + 921, without	whole number.
	 Decimal numbers are limited to the
having to calculate the	
indicated sum or	hundredths place.
product.	 Multiplication of decimal numbers is limited
	to tenths by hundredths.
Evidence Required:	 Division of decimal numbers is limited to
1. The student writes or	the factors described for the multiplication
identifies a numerical	of decimals above.
expression that records	
a calculation	TM1c
represented with words.	Stimulus: The student is presented with a verbal expression that
	represents a calculation with two non-nested sets of grouping
Tools: None	symbols.
i delsi i itelle	Symbols.
	Example Stem: Which expression correctly shows the difference
	between the product of 7 and 9 and the sum of 12 and 5?
	between the product of 7 and 9 and the sum of 12 and 5?
	A. $7 \times (9 - 12) + 5$
	B. $7 \times (9 + 12) + 5$
	C. $(7 \times 9) - (12 + 5)$
	D. $(7 + 9) + (12 + 5)$
	Rubric: (1 point) The student selects the correct expression
	(e.g., C).
	Response Type: Multiple Choice, single correct response
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Took Madal 2	Descent Fastures. The student is presented to intermed a
Task Model 2	Prompt Features: The student is prompted to interpret a
Response Type:	numerical expression without evaluating it.
Multiple Choice,	Stimulus Guidelines:
single correct	 Expressions may include up to 4-digit dividends and 2-
response	digit divisors for division.
	 Expressions may include single- or multi-digit numbers for
DOK Level 2	addition, subtraction, and multiplication.
	 Item difficulty may be adjusted via these example
5.0A.A.2	methods:
Write simple	 Expression contains zero, one, or two non-nested
expressions that record	sets of grouping symbols.
calculations with	 Expression contains one or two operations outside
numbers, and interpret	the grouping symbols.
numerical expressions	 Expression contains whole numbers, fractions, or
without evaluating	decimals.
them. For example,	 Fractions must have a denominator of 2, 3,
express the calculation	4, 5, 6, 8, 10, 12, or 100.
"add 8 and 7, then	 Addition and subtraction of fractions may
multiply by 2" as $2 \times (8$	include mixed numbers and fractions
+ 7). Recognize that 3	without common denominators.
× (18932 + 921) is	 Division of fractions is limited to whole number by unit fraction or unit fraction by
<i>three times as large as</i> 18932 + 921, without	number by unit fraction or unit fraction by whole number.
having to calculate the	 Decimal numbers are limited to the
indicated sum or	hundredths place.
product.	 Multiplication of decimal numbers is limited
<i>p</i> · · · · · · · · · · · · · · · · · · ·	to tenths by hundredths.
Evidence Required:	 Division of decimal numbers is limited to
2. The student	the factors described for the multiplication
interprets numerical	of decimals above.
expressions in words	
without evaluating	TM2
them.	Stimulus: The student is presented with a numerical expression.
– • •	
Tools: None	Example Stem: Which statement describes the value of the expression $4 \times (18,932 + 921)$?
	$expression 4 \times (10,932 + 921)$
	A. The value is 921 more than the product of 4 and
	18,932.
	B. The value is 18,932 more than the product of 4 and
	921.
	C. The value is 4 times as large as the sum of 18,932
	and 921.
	D. The value is 4 times as large as the product of 18,932
	and 921.
	Rubric: (1 point) The student selects the correct interpretation
	of the expression (e.g., C).
	Response Type: Multiple Choice, single correct response
	Response Type Huitiple choice, single correct response



Task Model 3a	Prompt Features: The student is prompted to evaluate
lask model Sa	
Deenenee Turney	numerical expressions that contain non-nested grouping
Response Type:	symbols.
Equation/Numeric	
	Stimulus Guidelines: The student is presented with a numerical
DOK Level 1	expression that contains one or two non-nested sets of grouping
	symbols.
5.0A.A.1	 Expressions may include up to 4-digit dividends and 2-
Use parentheses,	digit divisors for division.
brackets, or braces in	• Expressions may include single- or multi-digit numbers for
numerical expressions,	addition, subtraction, and multiplication.
and evaluate	• Item difficulty may be adjusted via these example
expressions with these	methods:
symbols.	 Expression contains one or two sets of grouping
Symbols.	symbols.
Evidence Dequired	
Evidence Required: 3. The student evaluates	 Expression contains one or two operations outside
	the grouping symbols.
numerical expressions	 Expression contains whole numbers, fractions, or
with grouping symbols.	decimals.
_	 Fractions must have a denominator of 2, 3,
Tools: None	4, 5, 6, 8, 10, 12, or 100.
	 Addition and subtraction of fractions may
	include mixed numbers and fractions
	without common denominators.
	 Division of fractions is limited to whole
	number by unit fraction or unit fraction by
	whole number.
	 Decimal numbers are limited to the
	hundredths place.
	 Multiplication of decimal numbers is limited
	to tenths by hundredths.
	 Division of decimal numbers is limited to
	the factors described for the multiplication
	of decimals above.
	TM3a
	Stimulus: The student is presented with a numerical expression
	that contains one set of grouping symbols.
	that contains one set of grouping symbols.
	Example Stem 1: Enter the value of $7 + (5 \times 12)$.
	Example Step 2. Enter the value of $7 + (5 \times 12) = 4$
	Example Stem 2: Enter the value of $7 + (5 \times 12) - 4$.
	Dubuin (1 maint) The student entropy the second tracks (s. s. 67)
	Rubric: (1 point) The student enters the correct value (e.g., 67;
	63).
	Desarra Terra Francisco (Nume
	Response Type: Equation/Numeric



Task Model 3b	ТМЗЬ
	Stimulus: The student is presented with a numerical expression
Response Type:	that contains two non-nested sets of grouping symbols.
Equation/Numeric	
	Example Stem 1: Enter the value of $(5 \times 12) + (27 \div 9)$.
DOK Level 1	
	Example Stem 2: Enter the exact value of $(6 \times \frac{2}{3}) + (\frac{2}{8} + \frac{3}{8})$.
5.0A.A.1	Example Stem 2. Enter the exact value of $(0 \times \frac{1}{3}) + (\frac{1}{8} + \frac{1}{8})$.
Use parentheses,	
brackets, or braces in	Example Stem 3:
numerical expressions,	Enter the exact value of $(2 \div 0.1) - (0.3 \times 0.4)$.
and evaluate	
expressions with these	
symbols.	Rubric: (1 point) The student enters the correct value (e.g., 63;
,	$4\frac{5}{8}$ or equivalent; 19.88).
Evidence Required:	0
3. The student evaluates	Response Type: Equation/Numeric
numerical expressions	
with grouping symbols.	
Tools: None	



Task Model 3c Response Type: Multiple choice, single correct response	TM3c Stimulus: The student is presented with a numerical expression that does not contain non-nested sets of grouping symbols and is prompted to identify the correct placement of parentheses to equal a specific value.
DOK Level 1	Example Stem: Taryn must place parentheses around numbers in this expression in order to make it equal 2.
5.0A.A.1	
Use parentheses,	30 ÷ 2 + 4 - 3
brackets, or braces in	
numerical expressions, and evaluate	Which expression equals 2?
expressions with these	A. 30 ÷ (2 + 4 - 3)
symbols.	B. $30 \div (2 + 4) - 3$
	C. $30 \div 2 + (4 - 3)$
Evidence Required:	D. (30 ÷ 2) + 4 - 3
3. The student evaluates numerical expressions	Rubric: (1 point) The student identifies the correct placement of
with grouping symbols.	parentheses (e.g., B).
Tools: None	Response Type: Multiple choice, single correct response
Version 3 update: Added new TM3c.	