

Math Grade 5 D

Grade Level Standard(s):

KY.5.OA.1

Materials:

- Math 5 D Attainment Task Questions for Student Use

Response Code:

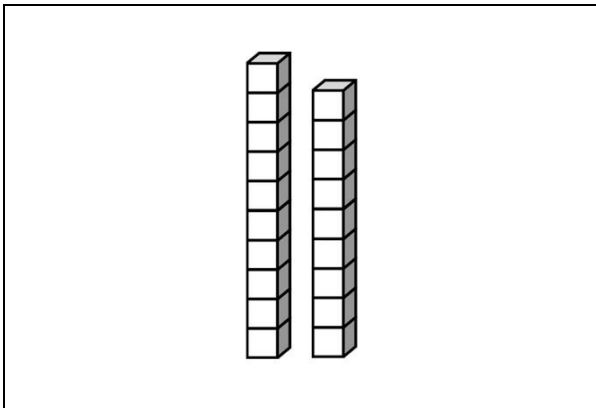
- Indicate the answer provided by the student.

Text Coding:

- “Quotation marks” indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis () are optional; they may replace or be read in addition to the word(s) immediately preceding.

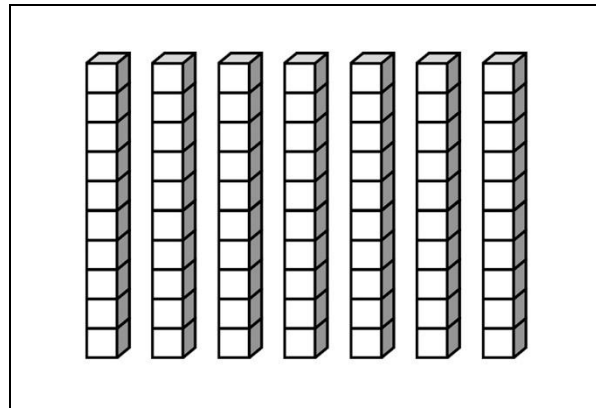
a.

19



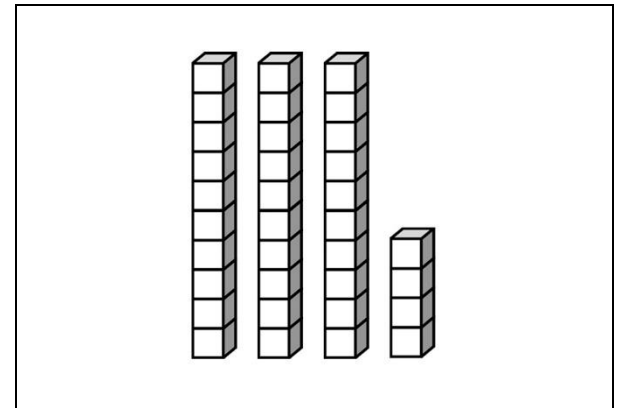
b.

70



c.

34



Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 9 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, “We are about to start the task, and I am going to ask you some questions.”

All questions from this task are available for presentation to the student in the material Math 5 D Attainment Task Questions for Student Use.

“Mr. Wright’s math class is completing a multiplication study guide for an upcoming test.”

Present the student with Math 5 D Reference Sheet 1), Math 5 D Order of Operations Reminder and the Elementary Math Counters and tell the student they may use the counters to solve the problem.

1. “Using the order of operations, solve the expression $6+4 \times (2 + 5)$.”

Response Option	Response Rationale
a. 19	<i>The student incorrectly applies the order of operations and multiplies 4 times 2, then adds the sum to the remaining digits.</i>
b. 70	<i>The student incorrectly applies the order of operations and adds 6 and 4, then adds 2 and 5, then multiplies the two sums.</i>
c. 34 (Correct)	<i>The student correctly applies the order of operations and first adds 2 to 5, then multiplies the sum by 4 then adds the product to 6.</i>
Depth of Knowledge (DOK) 1	

Math 5 D Reference Sheet

1) $6 + 4 \times (2 + 5)$

Math 5 D Order of Operations Reminder

- 1. Parentheses** (perform operations inside the parentheses first)
- 2. Multiply and divide** $\times \div$
- 3. Add and subtract** $+$ $-$

Math 5 D Attainment Task Questions for Student Use

1. Using the order of operations, solve the expression $6 + 4 \times (2 + 5)$.

Kentucky Academic Standard: KY.5.OA.1 - Use parentheses, brackets or braces in numerical expressions and evaluate expressions that include symbols.

MP.1, MP.3

Alternate Assessment Target: *Limit to parentheses only.*

Student Group	Number of Students*	Percent Correct #1
All Students	588	40.48%
Gender		
Female	189	43.39%
Male	399	39.10%
Ethnicity		
African American	63	44.44%
American Indian or Alaska Native	<10	Not Reported
Asian	23	43.48%
Hispanic of Latino	45	31.11%
Native Hawaiian of Pacific Islander	<10	Not Reported
White (Non-Hispanic)	421	40.62%
Two or More Races	34	41.18%
English Learner	46	39.13%
Economically Disadvantaged	418	37.80%

*Number of students that attempted the item