The Pennsylvania System of School Assessment

Mathematics
Item and Scoring Sampler

2016–2017
Grade 5

MATHEMATICS TEST DIRECTIONS

On the following pages are the mathematics questions.

- You may <u>not</u> use a calculator for question 1. You may use a calculator for all other questions on this test.

Directions for Multiple-Choice Questions:

Some questions will ask you to select an answer from among four choices.

For the multiple-choice questions:

- First solve the problem on scratch paper.
- Choose the correct answer and record your choice in the answer booklet.
- If none of the choices matches your answer, go back and check your work for possible errors.
- Only one of the answers provided is the correct response.

Directions for Open-Ended Questions:

Some questions will require you to write your response.

For the open-ended questions:

- These questions have more than one part. Be sure to read the directions carefully.
- You cannot receive the highest score for an open-ended question without completing all tasks in the question. For example, if the question asks you to show your work or explain your reasoning, be sure to show your work or explain your reasoning in the space provided.
- If the question does **not** ask you to show your work or explain your reasoning, you may use the space provided, but only those parts of your response that the question specifically asks for will be scored.
- Write your response in the appropriate location within the response box in the answer booklet. Some answers may require graphing, plotting, labeling, drawing, or shading. If you use scratch paper, be sure to transfer your final response and any needed work or reasoning to the answer booklet.

General Description of Scoring Guidelines for Mathematics Open-Ended Questions

4 – The response demonstrates a *thorough* understanding of the mathematical concepts and procedures required by the task.

The response provides correct answer(s) with clear and complete mathematical procedures shown and a correct explanation, as required by the task. Response may contain a minor "blemish" or omission in work or explanation that does not detract from demonstrating a *thorough* understanding.

3 – The response demonstrates a *general* understanding of the mathematical concepts and procedures required by the task.

The response and explanation (as required by the task) are mostly complete and correct. The response may have minor errors or omissions that do not detract from demonstrating a *general* understanding.

2 – The response demonstrates a *partial* understanding of the mathematical concepts and procedures required by the task.

The response is somewhat correct with *partial* understanding of the required mathematical concepts and/or procedures demonstrated and/or explained. The response may contain some work that is incomplete or unclear.

1 – The response demonstrates a *minimal* understanding of the mathematical concepts and procedures required by the task.

0 – The response has no correct answer and *insufficient* evidence to demonstrate any understanding of the mathematical concepts and procedures required by the task for that grade level.

Response may show only information copied from the question.

Special Categories within zero reported separately:

BLK (blank)...........Blank, entirely erased, or written refusal to respond
OT..........................Off task
LOE ....Response in a language other than English
IL ....Illegible

Grade 5 Formula Sheet

Formulas and conversions that you may need to work questions on this test are found below. You may refer back to this page at any time during the mathematics test.

2016
Grade 5

Standard Conversions

1 mile (mi) = 1,760 yards (yd)
1 mile = 5,280 feet (ft)
1 yard (yd) = 3 feet (ft)
1 foot = 12 inches (in.)

1 ton (T) = 2,000 pounds (lb)
1 pound = 16 ounces (oz.)

1 gallon (gal) = 4 quarts (qt)
1 quart = 2 pints (pt)
1 pint = 2 cups (c)
1 cup = 8 fluid ounces (fl oz.)

Metric Conversions

1 kilometer (km) = 1,000 meters (m)
1 meter = 100 centimeters (cm)
1 centimeter = 10 millimeters (mm)

1 kilogram (kg) = 1,000 grams (g)

1 liter (L) = 1,000 milliliters (mL)

Time Conversions

1 century = 10 decades
1 decade = 10 years (yr)
1 year (yr) = 12 months (mo)
1 year = 52 weeks (wk)
1 year = 365 days
1 week = 7 days
1 day = 24 hours (hr)
1 hour = 60 minutes (min)
1 minute = 60 seconds (sec)

Rectangular Prism
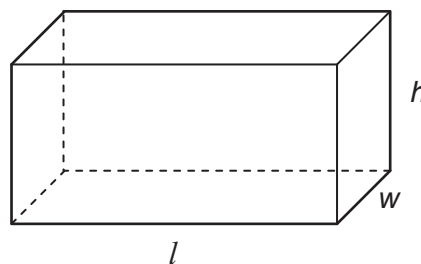
Volume = length × width × height
$V = l \times w \times h$

Volume = area of the base × height
$V = B \times h$

Volume = area of the base × width
$V = B \times w$

Volume = area of the base × length
$V = B \times l$

> **Question 1 in this sampler is to be solved <u>without</u> the use of a calculator.**

MULTIPLE-CHOICE ITEMS

1. Subtract: 124.8 – 9.34

    A. 115.46

    B. 115.54

    C. 125.54

    D. 125.56

Item Information		Option Annotations
Alignment	A-T.2.1.3	A. correct
Answer Key	A	B. brings down 4 in hundredths place; completes remaining "subtraction" correctly
Depth of Knowledge	1	C. subtracts lesser from greater digit in each place
		D. does not decrease previous digit by 1 when borrowing

p-values			
A	**B**	**C**	**D**
67%	22%	8%	3%

A calculator is permitted for use in solving questions 2–17 in this sampler.

2. Carlos is adding the mixed numbers $1\frac{1}{5}$ and $2\frac{1}{8}$ by changing each number into an improper fraction. Which pair of improper fractions should Carlos use?

A. $1\frac{1}{5} = \frac{8}{40}$ and $2\frac{1}{8} = \frac{5}{40}$

B. $1\frac{1}{5} = \frac{16}{40}$ and $2\frac{1}{8} = \frac{15}{40}$

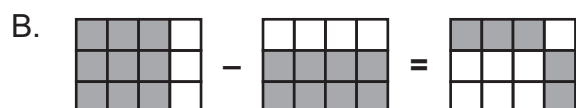C. $1\frac{1}{5} = \frac{48}{40}$ and $2\frac{1}{8} = \frac{50}{40}$

D. $1\frac{1}{5} = \frac{48}{40}$ and $2\frac{1}{8} = \frac{85}{40}$

Item Information				Option Annotations
Alignment	A-F.1			A. ignores the whole number
Answer Key	D			B. adds the whole number to the numerator and converts
Depth of Knowledge	2			C. multiplies the numerator by the whole number and adds the denominator
				D. correct

p-values			
A	**B**	**C**	**D**
21%	18%	20%	41%

3. Maggie has two equal-sized boxes.

- The first box is $\frac{3}{4}$ filled with beads.
- The second box is $\frac{2}{3}$ filled with beads.

Which shaded picture could be used to model the difference in the amounts each box is filled with beads?

A.

B.

C.

D.
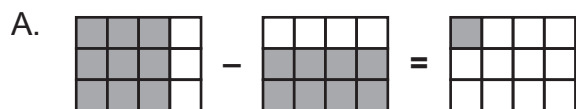
Item Information		Option Annotations
Alignment	A-F.1.1.1	A. correct
Answer Key	A	B. keeps all nonoverlapping shaded portions
Depth of Knowledge	2	C. subtracts shaded portions for numerator, keeps unshaded portions for denominator the same
		D. subtracts shaded portions for numerator, adds total numbers of portions for denominator

p-values			
A	**B**	**C**	**D**
46%	9%	26%	19%

4. Stephen has $\frac{1}{2}$ gallon of a chemical. He wants to put an equal amount of the chemical into each of 4 containers, using all of the chemical. Stephen wants to find the fraction of a gallon that will be in each container. Which equation correctly represents Stephen's problem?

A. $4 \times 2 = 8$

B. $4 \div \frac{1}{2} = 2$

C. $\frac{1}{2} \div 4 = \frac{1}{8}$

D. $\frac{1}{2} \times 4 = 2$

Item Information		Option Annotations
Alignment	A-F.2	A. reverses dividend and divisor, writes as multiplication problem
Answer Key	C	B. reverses dividend and divisor, multiplies instead of dividing
Depth of Knowledge	2	C. correct
		D. multiplies the amount of chemical by 4 for a total of 2 gallons

p-values			
A	**B**	**C**	**D**
9%	17%	57%	17%

5. Which expression is equivalent to $\frac{6}{7} \times \frac{3}{4}$?

A. $\frac{6 \times 3}{7 \times 4}$

B. $\frac{6 \times 4}{7 \times 3}$

C. $\frac{6}{7}\left(\frac{1}{4}\right) \times \frac{3}{4}\left(\frac{1}{7}\right)$

D. $\frac{6}{7}(4) \times \frac{3}{4}(7)$

Item Information		Option Annotations
Alignment	A-F.2.1.2	A. correct
Answer Key	A	B. inverts 3/4; thinking of division
Depth of Knowledge	1	C. thinks of finding common denominator
		D. thinks of finding common denominator

p-values			
A	**B**	**C**	**D**
72%	11%	9%	8%

6. Kaitlin walked the length of a path in a park 3 times. The total distance she walked was less than 1 mile. What must be true about the length of the path in the park?

A. The length of the path must be shorter than $\frac{1}{3}$ mile.

B. The length of the path must be between $\frac{1}{3}$ and 1 mile.

C. The length of the path must be between 1 and 3 miles.

D. The length of the path must be longer than 3 miles.

Item Information				Option Annotations
Alignment	A-F.2.1.3			A. correct
Answer Key	A			B. miscalculates; given the numbers, the total distance walked would be 1 to 3 miles
Depth of Knowledge	2			C. recycles the given numbers; the total distance walked would be 3 to 9 miles
***p*-values**				D. confuses the number of times she walked the path with the length of the path; the total distance walked would be more than 9 miles
A	**B**	**C**	**D**	
46%	39%	10%	5%	

7. Paul brings 4 quarts of potato salad to a picnic. Each serving of potato salad is $\frac{1}{8}$ quart. How many total servings of potato salad does Paul bring to the picnic?

    A. 2

    B. 4

    C. 12

    D. 32

Item Information		Option Annotations	
Alignment	A-F.2.1.4	A. $8 \div 4$	
Answer Key	D	B. $8 - 4$	
		C. $4 + 8$	
Depth of Knowledge	2	D. correct	

p-values			
A	**B**	**C**	**D**
10%	13%	14%	63%

8. A decimal number is multiplied by 10^6. Which statement describes the change in position of the decimal point in the decimal number as a result of the multiplication?

    A. The decimal point moves 5 places to the left.

    B. The decimal point moves 6 places to the left.

    C. The decimal point moves 6 places to the right.

    D. The decimal point moves 10 places to the right.

Item Information		Option Annotations
Alignment	A-T.1.1.2	A. considers adding zeros instead of moving decimal point
Answer Key	C	B. reverses direction of movement
Depth of Knowledge	1	C. correct
		D. treats 10 as if it were the exponent

p-values			
A	**B**	**C**	**D**
10%	27%	56%	7%

9. A number written in expanded form is shown below.

$$(8 \times 1{,}000) + (3 \times 100) + (2 \times 1) + \left(4 \times \frac{1}{10}\right) + \left(7 \times \frac{1}{1{,}000}\right)$$

What is the number written in standard form?

A. 832.47

B. 8,302.407

C. 8,302.47

D. 8,320.407

Item Information		Option Annotations
Alignment	A-T.1.1.3	A. omits zeros
Answer Key	B	B. correct
Depth of Knowledge	1	C. omits zero in fractional part
		D. misplaces zero in whole-number part

		p-values		
A	**B**	**C**	**D**
10%	67%	12%	11%

10. A scientist listed the volumes, in milliliters, of some liquids used in an experiment.

<div align="center">1.25   1.079   1.204   1.18</div>

Which inequality correctly compares the volumes, in milliliters, of two of these liquids?

    A.   1.25 < 1.204

    B.   1.079 < 1.25

    C.   1.18 > 1.204

    D.   1.079 > 1.18

Item Information		Option Annotations
Alignment	A-T.1.1.4	A. compares whole numbers in which 25 is less than 204
Answer Key	B	B. correct
Depth of Knowledge	1	C. thinks 1.204 is the smaller number since it includes thousandths; 1.18 only goes to hundredths; thousandths is less than hundredths
		D. compares whole number in which 79 is greater than 18

p-values			
A	**B**	**C**	**D**
18%	55%	12%	15%

11. What is 27.462 rounded to the nearest tenth?

    A. 20

    B. 27.4

    C. 27.5

    D. 30

Item Information		Option Annotations
Alignment	A-T.1.1.5	A. truncates at tens place
Answer Key	C	B. truncates instead of rounding C. correct
Depth of Knowledge	1	D. rounds to tens place

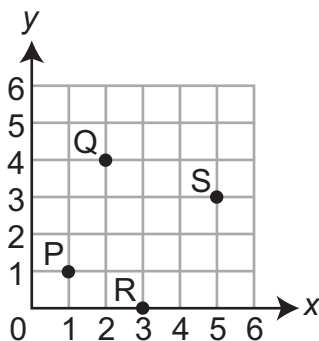| *p*-values			
A	**B**	**C**	**D**
4%	14%	70%	12%

12. Juan is estimating the quotient of 9,648.18 ÷ 15.85. He first rounds both 9,648.18 and 15.85 to the nearest whole number. What should be Juan's estimated quotient?

    A. 63

    B. 603

    C. 630

    D. 6,030

Item Information		Option Annotations
Alignment	A-T.2.1.2 A-T.1.1.5	A. drops 0 from quotient B. correct C. swaps digit order in quotient D. adds extra 0 at end of quotient
Answer Key	B	
Depth of Knowledge	1	

p-values			
A	**B**	**C**	**D**
7%	52%	24%	17%

13. Jerry has 56.92 centimeters (cm) of wire. He uses 2 pieces of the wire. Each piece he uses is 7.37 cm long. What is the length of the remaining wire, rounded to the nearest tenth of a centimeter?

    A.   7.7 cm

    B.   42.2 cm

    C.   49.6 cm

    D.   71.7 cm

Item Information		Option Annotations
Alignment	A-T.2.1.3 A-T.1.1.5	A. divides 56.92 by 7.37 and rounds B. correct C. only subtracts one piece of wire and rounds D. adds 2 pieces of wire instead of subtracting; 56.92 + 14.74
Answer Key	B	
Depth of Knowledge	2	

p-values			
A	**B**	**C**	**D**
14%	58%	20%	8%

**14.** Four points are plotted on the coordinate grid shown below.

Which statement about the plotted points is true?

A. Point P is located at the origin.

B. Point Q has 4 as its *x*-coordinate.

C. Point R is located on the *y*-axis.

D. Point S has 3 as its *y*-coordinate.

Item Information		Option Annotations
Alignment	C-G.1.1.1 C-G.1.1.2	A. sees (1, 1) as the origin B. misinterprets 4 as an *x*-coordinate instead of a *y*-coordinate C. confuses *x*-axis and *y*-axis D. correct
Answer Key	D	
Depth of Knowledge	1	

p-values			
A	**B**	**C**	**D**
11%	10%	7%	72%

15. Mason graphs point M on a coordinate grid to represent the number of pens (*x*) he bought and the number of dollars (*y*) he paid for the pens as shown below.
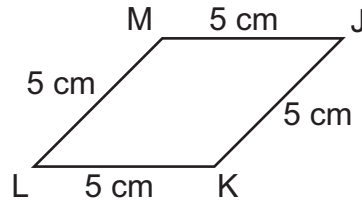
Pen Purchases
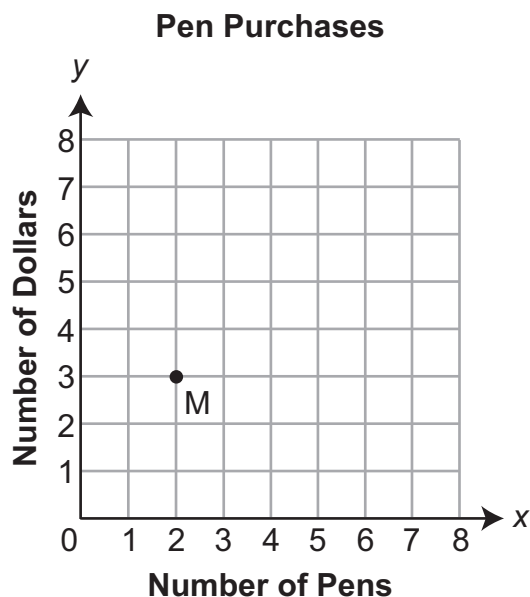
Franco will graph point F on the same coordinate grid to represent that he bought 3 **more** pens than Mason and paid $5 **more** than Mason. What ordered pair describes the location of point F?

A. (5, 8)

B. (6, 7)

C. (7, 6)

D. (8, 5)

Item Information		Option Annotations
Alignment	C-G.1.1.2	A. correct
Answer Key	A	B. reverses quantities, counts 3 more dollars and 5 more pens; reverses *x*-axis and *y*-axis
Depth of Knowledge	2	C. reverses quantities, counts 3 more dollars and 5 more pens
		D. reverses *x*-axis and *y*-axis

p-values			
A	**B**	**C**	**D**
66%	12%	10%	12%

16. Quadrilateral JKLM is shown below.

Which statement gives the **most** specific name for quadrilateral JKLM and the reason for that name?

A.   Quadrilateral JKLM is a rhombus because it is a trapezoid and contains no right angles.

B.   Quadrilateral JKLM is a rhombus because it is a parallelogram with all sides equal in length.

C.   Quadrilateral JKLM is a parallelogram because it is a trapezoid with all sides equal in length.

D.   Quadrilateral JKLM is a parallelogram because it is a trapezoid and because both pairs of opposite angles have equal measures.

Item Information		Option Annotations
Alignment	C-G.2.1.1	A. uses most specific name, but figure is not a trapezoid
Answer Key	B	B. correct
Depth of Knowledge	2	C. not most specific name, and figure is not a trapezoid
		D. not most specific name, and figure is not a trapezoid

p-values			
A	**B**	**C**	**D**
16%	51%	15%	18%

OPEN-ENDED QUESTION

17. Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

Go to the next page to finish question 17.

17. *Continued.* Please refer to the previous page for task explanation.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

Item-Specific Scoring Guideline

#17 Item Information

Alignment	B-O.2	Depth of Knowledge	3	Mean Score	1.20

Assessment Anchor this item will be reported under:

M05.B-O.2—Analyze patterns and relationships.

Specific Anchor Descriptor addressed by this item:

M05.B-O.2.1—Create, extend, and analyze patterns.

Scoring Guide

Score	In this item, the student . . .
4	Demonstrates a thorough understanding of how to analyze patterns and relationships by correctly solving problems and clearly explaining procedures.
3	Demonstrates a general understanding of how to analyze patterns and relationships by correctly solving problems and clearly explaining procedures with only minor errors or omissions.
2	Demonstrates a partial understanding of how to analyze patterns and relationships by correctly performing a significant portion of the required task.
1	Demonstrates minimal understanding of how to analyze patterns and relationships.
0	The response has no correct answer and insufficient evidence to demonstrate any understanding of the mathematical concepts and procedures as required by the task. Response may show only information copied from the question.

Top-Scoring Student Response and Training Notes

Score	Description
4	Student earns 4 points.
3	Student earns 3 points.
2	Student earns 2 points.
1	Student earns 1 point. OR Student demonstrates minimal understanding of how to analyze patterns and relationships.
0	Response is incorrect or contains some correct work that is irrelevant to the skill or concept being measured.

Top-Scoring Response

Part A (1 point):

1 point for correct answer

What?	Why?
3, 9, 15, 21	

Part B (1 point):

1 point for correct answer

What?	Why?
33	

Part C (2 points):

1 point for correct answer
1 point for complete explanation

What?	Why?
19	**Sample Explanation:** Each term in Adam's pattern is always increasing by one more than the same term in Brianna's pattern. Since they started with the same number, the difference in the 20th term will be 20 − 1 = 19.

Question 17
Page 1 of 2

Item ID

Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

EQ

3, 9, 15, 21

12 / 1000

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

EQ

33

The student has given a correct answer.

The student has given a correct answer.

Review/End Test   Pause   Flag   Options   Next

Line Guide   Item ID   ?

Adam and Brianna each made a number pattern.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

EQ

Briannas 20th term is 19 numbers smaller than Adam. Since they both start with 3 and go 20 terms it would be 19 because thats how many numbers are inbetween the 1st term and the 20th term and there is only a one number difference in what they do.

246 / 1000

The student has given a correct answer and complete explanation.

Review/End Test   Pause   Flag   Options   Back

STUDENT RESPONSE

Response Score: 3 points

17. Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

3, 9, 15, 21

+6 +6 +6

> The student has given a correct answer.

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

The first number greater than three in both patterns is 33.

> The student has given a correct answer.

Go to the next page to finish question 17.

17. *Continued.* Please refer to the previous page for task explanation.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

The 20th term in Brianna's pattern is 20 less than the 20th term in Adams pattern. Besides expanding the patterns to the 20th term, for Adam and Brianna you can add the number they started with and the rule then multiply it by 20 to get the 20th term in the patterns.

Adam = 3 + 6 × 20 = 20th term = 123

Brianna = 3 + 5 × 20 = 20th term = 103

> The student has given an incorrect answer due to a counting error and has given a complete explanation.

STUDENT RESPONSE

Response Score: 2 points

17. Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

3, 9, 15, 21, 27

> The student has given a correct answer.

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

3, 8, 13, 18, 24

> The student has given an incorrect answer.

Go to the next page to finish question 17.

17. *Continued.* Please refer to the previous page for task explanation.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

Briannas is way smaller than Adams Just think they both started with three and Adam is Adding 6 to 3 20 times an Brianna is starting with 3 and Adding 5 You Know from the top of your head that Adam is always going to be a head of Brianna
So $20 \times 5 + 3 = 103$
$20 \times 6 + 3 = 123$

$$\begin{array}{r} 123 \\ -103 \\ \hline 20 \end{array}$$

So brianna is 20 numbers smaller than Adam

> The student has given an incorrect answer due to a counting error and has given a complete explanation.

Question 17
Page 1 of 2

Item ID

Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

EQ

3, 9, 15, 21

12 / 1000

The student has given a correct answer.

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

EQ

3, 8, 13, 18

The student has given an incorrect answer.

Review/End Test | Pause | Flag | Options | Next

Question 17
Page 2 of 2

Item ID

Adam and Brianna each made a number pattern.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

EQ

brinna's smaller term is 18
adam's term is 21

45 / 1000

The student has given an incorrect answer and an incorrect explanation.

Review/End Test | Pause | Flag | Options | Back

STUDENT RESPONSE

Response Score: 0 points

17. Adam and Brianna each made a number pattern.

Adam's pattern starts with the number 3 and follows the rule "add 6."

A. What are the first four terms of Adam's pattern?

9, 13, 19, 25, 31, 37,
43, 49, 55, 61, 67, 73, 79,
85, 91, 97, 103, 109, 115, 121

> The student has given an incorrect answer.

Brianna's pattern starts with the number 3 and follows the rule "add 5."

B. What is the first number greater than 3 that will be in both Adam's pattern and Brianna's pattern?

25, 30, 35, 40, 45, 50, 55, 60,
65, 70, 75, 80, 85, 90, 95, 100,
105, 110, 115, 120

> The student has given an incorrect answer.

Go to the next page to finish question 17.

17. *Continued.* Please refer to the previous page for task explanation.

Adam and Brianna each wrote the first 20 terms in their patterns.

C. How much smaller is the 20th term in Brianna's pattern than the 20th term in Adam's pattern? Explain how to determine the difference **without** expanding both patterns to the 20th term.

1 Because, Brianna pattern goes up to 120, and Adam pattern goes up to 12, then I do 121 - 120 = 1.

> The student has given an incorrect answer and an incorrect explanation.

MATHEMATICS—SUMMARY DATA

MULTIPLE-CHOICE

Sample Number	Alignment	Answer Key	Depth of Knowledge	p-values			
				A	**B**	**C**	**D**
1	A-T.2.1.3	A	1	67%	22%	8%	3%
2	A-F.1	D	2	21%	18%	20%	41%
3	A-F.1.1.1	A	2	46%	9%	26%	19%
4	A-F.2	C	2	9%	17%	57%	17%
5	A-F.2.1.2	A	1	72%	11%	9%	8%
6	A-F.2.1.3	A	2	46%	39%	10%	5%
7	A-F.2.1.4	D	2	10%	13%	14%	63%
8	A-T.1.1.2	C	1	10%	27%	56%	7%
9	A-T.1.1.3	B	1	10%	67%	12%	11%
10	A-T.1.1.4	B	1	18%	55%	12%	15%
11	A-T.1.1.5	C	1	4%	14%	70%	12%
12	A-T.2.1.2 A-T.1.1.5	B	1	7%	52%	24%	17%
13	A-T.2.1.3 A-T.1.1.5	B	2	14%	58%	20%	8%
14	C-G.1.1.1 C-G.1.1.2	D	1	11%	10%	7%	72%
15	C-G.1.1.2	A	2	66%	12%	10%	12%
16	C-G.2.1.1	B	2	16%	51%	15%	18%

OPEN-ENDED

Sample Number	Alignment	Points	Depth of Knowledge	Mean Score
17	B-O.2	4	3	1.20