



DEPARTMENT OF EDUCATION

**PAWS**  
**Mathematics**  
**Grade 5**  
**Released Items**  
**With Data**

**Operations and Algebraic Thinking**

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## Mathematics Released Items with Data Introduction Page / Data Definitions

This Released Items with Data document provides a subset of items from the 2015 administration of the PAWS test. The data for an item is on the page that follows that item. The following provides definitions for the data fields on the data page.

### Item Information

**Title:** Title of the passage/stimulus the item belongs to

**2012 WyCPS Domain:** The reporting category of the state content standards

**2012 WyCPS Standard:** State content standard

**Item Code:** Identification code assigned to the item

**Admin:** The year an item is administered

**Item Type:** The mode in which a student responds (MC means multiple-choice)

**Correct Answer:** The option letter (A, B, C, or D) that corresponds to the correct answer

**Item Dok:** The item's Depth of Knowledge designation, also called Cognitive Complexity;

- 1 - Recall and reproduction
- 2 - Skills and concepts
- 3 - Strategic and extended thinking

**Total N-count:** Number of students counted as taking the test in which the item appears during the listed administration (Includes item omissions)

**Pvalue/Mean Score:** For a multiple-choice item, the percent of students choosing the correct answer

### Score Analysis

**MC Row:** Answer options available for students to choose from (including those who do not choose any option); an asterisk designates the correct answer

**%Choosing Row:** Percent of students choosing an option (or omitting)

**Item Notes:** Area where user can make notes

- 00** The table provided shows the rules and three terms for Patterns M and N.

Pattern	Rule	Terms					
		1	2	3	4	5	6
M	Add 3	1	4	7			
N	Add 3	5	8	11			

**What is the difference between the sixth term of Pattern N and the sixth term of Pattern M?**

- (A) 3
- (B) 4
- (C) 15
- (D) 19

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Analyze patterns and relationships.
2012 WyCPS Standard:	5.OA.3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.
Item Code:	VF491734

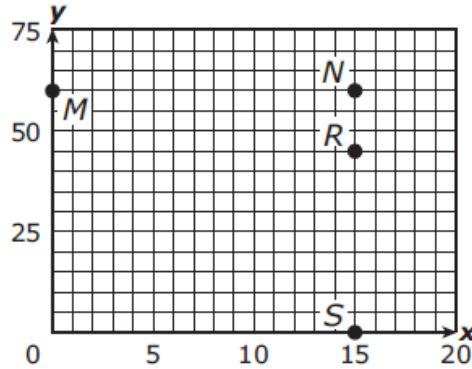
Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	B	2	772	0.697

Score Analysis					
MC	A	B*	C	D	Omit
%Choosing	12.694	69.689	9.715	7.254	0.648

- 00 The ordered pairs below show the relationship between two sets of numbers.

**Ordered Pairs**

(0, 0)  
 (5, 20)  
 (10, 40)



Which letter represents a point with coordinates that have the same relationship as the ordered pairs?

- (A) M
- (B) N
- (C) R
- (D) S

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
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Item Code:	VF741405

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	B	2	693	0.289

Score Analysis					
MC	A	B*	C	D	Omit
%Choosing	22.078	28.86	30.159	18.903	0

**00** Which expression represents this statement?

**8 added to the product of 2 and the quotient of 16 and 4**

- Ⓐ  $8 + 2 \times (16 \div 4)$
- Ⓑ  $8 + 2 \div (16 \times 4)$
- Ⓒ  $(8 + 2) \times (16 \div 4)$
- Ⓓ  $(8 + 2) \div (16 \times 4)$

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Write and interpret numerical expressions.
2012 WyCPS Standard:	5.OA.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.
Item Code:	VH092936

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2015	MC	A	2	692	0.415

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	41.474	14.451	29.48	13.584	1.012