Wyoming
DEPARTMENT OF EDUCATION

PAWS
Mathematics
Grade 3

Released Items
With Data

Operations and Algebraic Thinking

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Portions of this work were previously published.

Printed in the United States of America.

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 **Henry rode his bike 10 miles in 2 hours. He rode the same distance each hour. Which expression could be used to find the number of miles he rode each hour?**

Ⓐ 2×10

Ⓑ $2 + 10$

Ⓒ $10 - 2$

Ⓓ $10 \div 2$

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Represent and solve problems involving multiplication and division.
2012 WyCPS Standard:	3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.
Item Code:	VF394373

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	D	2	701	0.308

Score Analysis					
MC	**A**	**B**	**C**	**D***	**Omit**
%Choosing	58.345	9.272	1.427	30.813	0.143

00 **Ms. Harris gave 4 stickers to each of her 7 students. What is the total number of stickers Ms. Harris gave to her students?**

Ⓐ 3

Ⓑ 11

Ⓒ 21

Ⓓ 28

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Represent and solve problems involving multiplication and division.
2012 WyCPS Standard:	3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
Item Code:	VF393800

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	D	2	711	0.722

Score Analysis					
MC	**A**	**B**	**C**	**D***	**Omit**
%Choosing	5.485	18.143	3.797	72.152	0.422

00 **Mr. Hodge has 21 windows to clean. He will clean 3 windows each hour. Exactly how many hours, ☐, will it take for Mr. Hodge to clean all the windows?**

Ⓐ 7 hours because 21 ÷ ☐ = 3

Ⓑ 18 hours because 3 + ☐ = 21

Ⓒ 24 hours because 21 + 3 = ☐

Ⓓ 63 hours because 21 × 3 = ☐

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Represent and solve problems involving multiplication and division.
2012 WyCPS Standard:	3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
Item Code:	VF803290

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	A	2	741	0.638

Score Analysis					
MC	**A***	**B**	**C**	**D**	**Omit**
%Choosing	63.833	11.336	12.011	12.551	0.27

00 **A store has 4 boxes of red apples and 3 boxes of green apples. Each box contains 10 apples. How many apples are there altogether?**

Ⓐ 70

Ⓑ 52

Ⓒ 42

Ⓓ 34

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
2012 WyCPS Standard:	3.OA.8 Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).)
Item Code:	VF393775

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	2	711	0.852

Score Analysis					
MC	**A***	**B**	**C**	**D**	**Omit**
%Choosing	85.232	2.391	3.797	8.158	0.422

00 **Which statement is always true?**

Ⓐ A whole number multiplied by an even number will be even.

Ⓑ A whole number multiplied by an odd number will be odd.

Ⓒ A whole number multiplied by 5 will end in 0.

Ⓓ A whole number multiplied by 2 will end in 2.

Item Information	
2012 WyCPS Domain:	Operations and Algebraic Thinking
2012 WyCPS Cluster:	Solve problems involving the four operations, and identify and explain patterns in arithmetic.
2012 WyCPS Standard:	3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.
Item Code:	VF493428

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	2	699	0.531

Score Analysis					
MC	**A***	**B**	**C**	**D**	**Omit**
%Choosing	53.076	18.741	18.169	9.585	0.429