Wyoming

DEPARTMENT OF EDUCATION
Leading the Drive to Top 5!

PAWS
Mathematics Grade 5

Released Items With Data

2014

Mathematics Released Items with Data
Introduction Page / Data Definitions

This Released Items with Data document provides a subset of items from the 2013 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?

Ⓐ　　3

Ⓑ　　4

Ⓒ　15

Ⓓ　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

Item Notes

00 **Which of these is the same as 504.32?**

Ⓐ 5 tens, 4 ones, 3 tenths, and 2 hundredths

Ⓑ 5 hundreds, 4 tens, 3 tenths, and 2 hundredths

Ⓒ 5 hundreds, 4 ones, 3 tenths, and 2 hundredths

Ⓓ 5 hundreds, 4 ones, 3 hundredths, and 2 thousandths

Item Information	
2012 WyCPS Domain:	Number and Operations in Base Ten
2012 WyCPS Cluster:	Understand the place value system.
2012 WyCPS Standard:	5.NBT.3 Read, write, and compare decimals to thousandths.
Item Code:	VF491962

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	C	1	664	0.705

Score Analysis					
MC	**A**	**B**	**C***	**D**	**Omit**
%Choosing	8.434	13.253	70.482	6.928	0.904

Item Notes

00 Which digit should be placed in the box to complete this division?

$$
\begin{array}{r}
\square 89 \\
25\overline{)7{,}248} \\
-50 \\
\hline
224 \\
-200 \\
\hline
248 \\
-225 \\
\hline
23 \\
\end{array}
$$

(A) 1

(B) 2

(C) 3

(D) 4

Item Information	
2012 WyCPS Domain:	Number and Operations in Base Ten
2012 WyCPS Cluster:	Perform operations with multi-digit whole numbers and with decimals to hundredths.
2012 WyCPS Standard:	5.NBT.6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Item Code:	VF491945

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	B	1	657	0.795

Score Analysis					
MC	**A**	**B***	**C**	**D**	**Omit**
%Choosing	6.393	79.452	7.763	5.784	0.609

Item Notes

00 In the rectangle shown, $\frac{1}{2}$ is shaded in gray and $\frac{3}{4}$ is filled with diagonal lines.

$$\frac{3}{4}$$

$$\frac{1}{2}$$
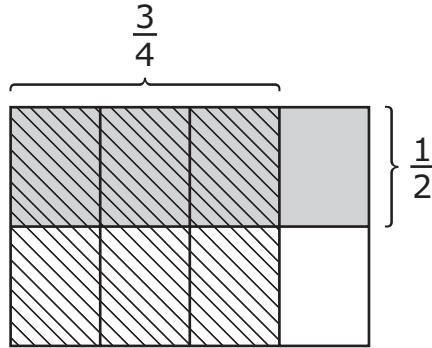
Which equation could be used to represent the multiplication shown in this rectangle?

Ⓐ $\quad \frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$

Ⓑ $\quad \frac{3}{4} \times \frac{1}{2} = \frac{7}{8}$

Ⓒ $\quad \frac{3}{4} \times \frac{1}{2} = \frac{2}{8}$

Ⓓ $\quad \frac{3}{4} \times \frac{1}{2} = \frac{4}{8}$

Item Information	
2012 WyCPS Domain:	Number and Operations—Fractions
2012 WyCPS Cluster:	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.
2012 WyCPS Standard:	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
Item Code:	VF492128

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	1	668	0.696

Score Analysis					
MC	**A***	**B**	**C**	**D**	**Omit**
%Choosing	69.611	15.269	5.689	9.431	0

Item Notes

00 **Tina packed a rectangular solid figure with exactly 36 unit cubes. There were no gaps or overlaps. What could be the length, width, and height of the solid figure?**

Ⓐ   3 units long, 3 units wide, 6 units high

Ⓑ   3 units long, 3 units wide, 3 units high

Ⓒ   2 units long, 4 units wide, 6 units high

Ⓓ   2 units long, 3 units wide, 6 units high
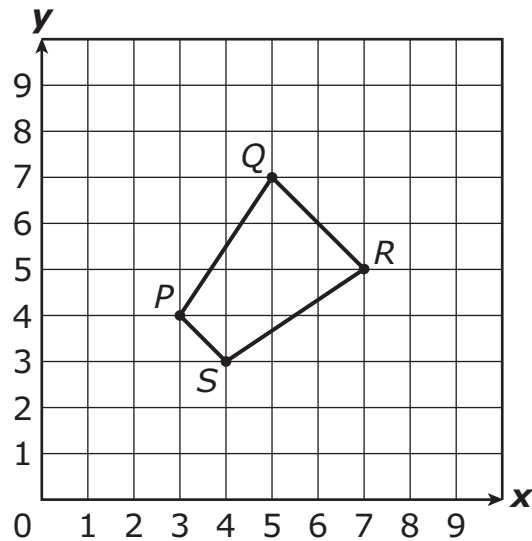
Item Information	
2012 WyCPS Domain:	Measurement and Data
2012 WyCPS Cluster:	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.
2012 WyCPS Standard:	5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
Item Code:	VF492246

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	D	2	667	0.415

Score Analysis					
MC	**A**	**B**	**C**	**D***	**Omit**
%Choosing	23.688	16.192	18.141	41.529	0.45

Item Notes

00 The coordinates of three of the vertices of quadrilateral *PQRS* are (3, 4), (5, 7), (7, 5).

Which ordered pair represents the fourth vertex?

Ⓐ (3, 4)

Ⓑ (4, 3)

Ⓒ (5, 3)

Ⓓ (6, 6)

Item Information

2012 WyCPS Domain:	Geometry
2012 WyCPS Cluster:	Graph points on the coordinate plane to solve real-world and mathematical problems.
2012 WyCPS Standard:	5.G.2 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.
Item Code:	VF492391

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	B	2	672	0.671

Score Analysis

MC	A	B*	C	D	Omit
%Choosing	21.429	67.113	8.482	2.827	0.149

Item Notes