



DEPARTMENT OF EDUCATION

Leading the Drive to Top 5!

PAWS Mathematics Grade 6

Released Items With Data

2014

Copyright © **2014** by the Wyoming Department of Education.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the Wyoming Department of Education.

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 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 Cats usually have 1 tail, 4 legs, 2 eyes, 2 ears, and 1 nose each. Based on this information, which statement is true about cats?

- A) The ratio of ears to nose is 1:1.
- B) The ratio of eyes to ears is 1:1.
- C) The ratio of legs to ears is 1:2.
- D) The ratio of tails to eyes is 2:1.

Item Information	
2012 WyCPS Domain:	Ratios and Proportional Relationships
2012 WyCPS Cluster:	Understand ratio concepts and use ratio reasoning to solve problems.
2012 WyCPS Standard:	6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”
Item Code:	VF491813

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	B	2	666	0.399

Score Analysis					
MC	A	B*	C	D	Omit
%Choosing	9.76	39.94	15.165	35.135	0

Item Notes

- 00** The table shows the recorded amount of rainwater that fell during a rainfall (in millimeters) and the time elapsed (in minutes).

Rainfall Measurements

Amount of Rain (millimeters)	Time Elapsed (minutes)
50	20
75	30
150	60
225	90

If the rain fell at a constant rate, which additional pair of values fits in the table?

A)

Amount of Rain (millimeters)	Time Elapsed (minutes)
25	10

B)

Amount of Rain (millimeters)	Time Elapsed (minutes)
100	50

C)

Amount of Rain (millimeters)	Time Elapsed (minutes)
125	40

D)

Amount of Rain (millimeters)	Time Elapsed (minutes)
200	70

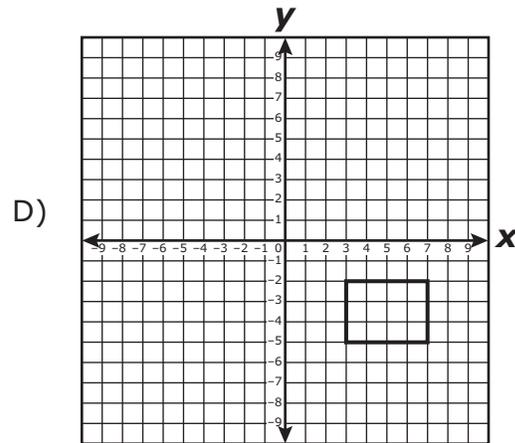
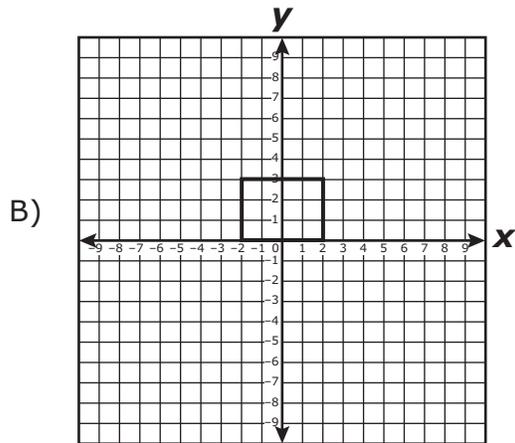
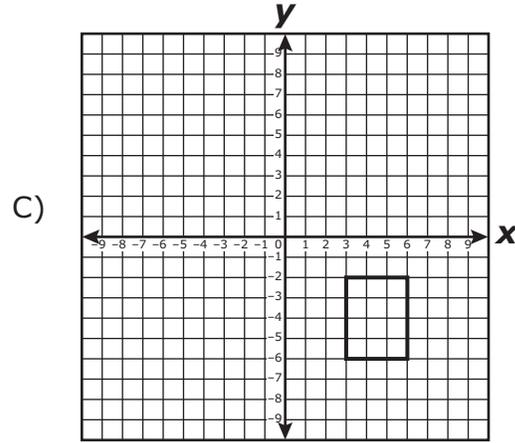
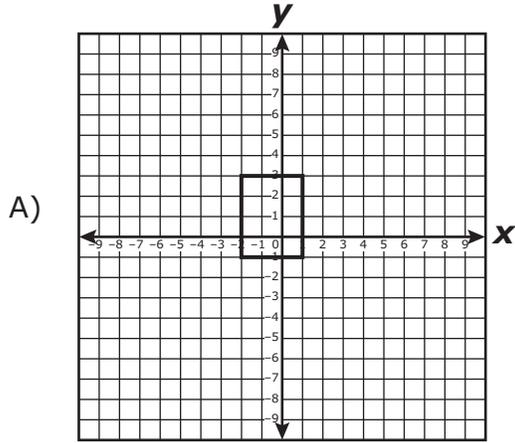
Item Information	
2012 WyCPS Domain:	Ratios and Proportional Relationships
2012 WyCPS Cluster:	Understand ratio concepts and use ratio reasoning to solve problems.
2012 WyCPS Standard:	6.RP.3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
Item Code:	VF491947

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	2	660	0.47

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	46.97	18.03	15.303	19.545	0.152

Item Notes

- 00** A rectangle is 3 units long horizontally and 4 units wide vertically. One of the vertices of the rectangle is located at $(-2, 3)$. Which coordinate plane could show this rectangle?



Item Information	
2012 WyCPS Domain:	The Number System
2012 WyCPS Cluster:	Apply and extend previous understandings of numbers to the system of rational numbers.
2012 WyCPS Standard:	6.NS.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.
Item Code:	VF492238

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	2	660	0.323

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	32.273	32.727	18.333	15.758	0.909

Item Notes

00 Which number is not a coefficient of one of the terms in the expression $5x^2 + 3x + y + 4y^2$?

- A) 2
- B) 3
- C) 4
- D) 5

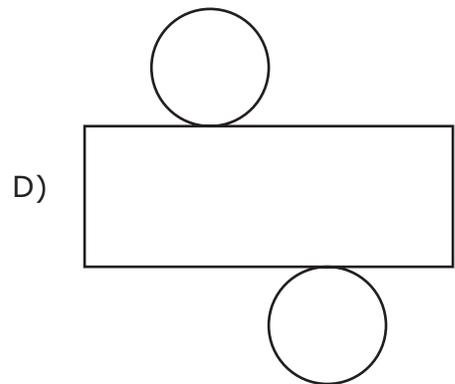
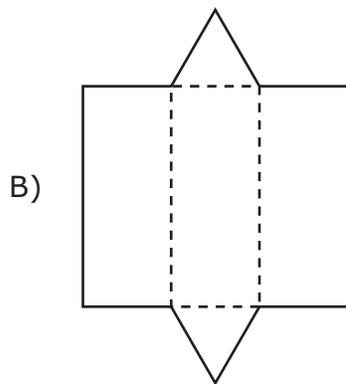
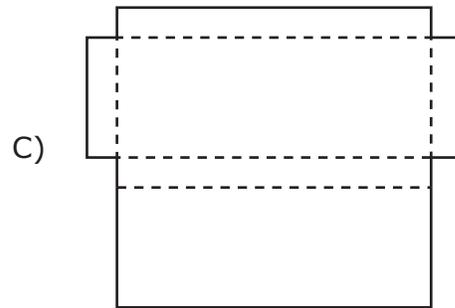
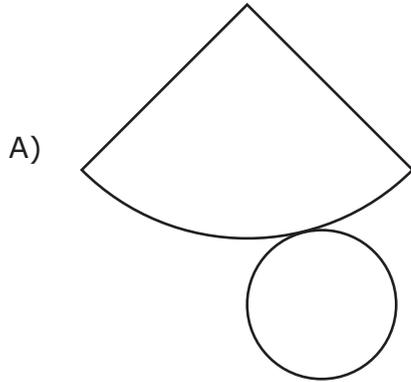
Item Information	
2012 WyCPS Domain:	Expressions and Equations
2012 WyCPS Cluster:	Apply and extend previous understandings of arithmetic to algebraic expressions.
2012 WyCPS Standard:	6.EE.2 Write, read, and evaluate expressions in which letters stand for numbers.
Item Code:	VF492676

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	1	658	0.553

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	55.319	18.237	15.046	10.638	0.76

Item Notes

00 Linda is making pillows in the shape of cylinders. Which net could represent one of the pillows?



Item Information	
2012 WyCPS Domain:	Geometry
2012 WyCPS Cluster:	Solve real-world and mathematical problems involving area, surface area, and volume.
2012 WyCPS Standard:	6.G.4 Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
Item Code:	VF493008

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	D	2	674	0.712

Score Analysis					
MC	A	B	C	D*	Omit
%Choosing	11.573	5.49	11.573	71.217	0.148

Item Notes

