



DEPARTMENT OF EDUCATION

PAWS Mathematics Grade 7

Released Items With Data

2016

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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 A soup recipe calls for $2\frac{1}{2}$ cups of milk per $\frac{3}{4}$ pound of meat. How much milk is needed for one pound of meat?

- A) $3\frac{1}{3}$ cups of milk
- B) $3\frac{1}{4}$ cups of milk
- C) $2\frac{2}{3}$ cups of milk
- D) $1\frac{7}{8}$ cups of milk

Item Information	
2012 WyCPS Domain:	Ratios and Proportional Relationships
2012 WyCPS Cluster:	Analyze proportional relationships and use them to solve real-world and mathematical problems.
2012 WyCPS Standard:	7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.
Item Code:	VF736941

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	A	2	677	0.27

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	27.031	36.041	26.736	10.044	0.148

Item Notes

00 Which value is not equivalent to $\left(\frac{-5}{9}\right)$?

A) $\left(\frac{5}{-9}\right)$

B) $-\left(\frac{5}{9}\right)$

C) $-\left(\frac{5}{-9}\right)$

D) $-\left(\frac{-5}{-9}\right)$

Item Information	
2012 WyCPS Domain:	The Number System
2012 WyCPS Cluster:	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.
2012 WyCPS Standard:	7.NS.2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.
Item Code:	VH129941

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2015	MC	C	1	689	0.179

Score Analysis					
MC	A	B	C*	D	Omit
%Choosing	17.271	21.771	17.852	42.961	0.145

Item Notes

00 Which expression is equivalent to $-\frac{2}{9}(27x - 36) - \frac{1}{5}(25 - 50x)$?

A) $-16x - 13$

B) $-16x + 3$

C) $4x - 13$

D) $4x + 3$

Item Information					
2012 WyCPS Domain:	Expressions and Equations				
2012 WyCPS Cluster:	Use properties of operations to generate equivalent expressions.				
2012 WyCPS Standard:	7.EE.1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.				
Item Code:	VF492616				
Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	D	2	668	0.117

Score Analysis					
MC	A	B	C	D*	Omit
%Choosing	36.527	29.79	21.557	11.677	0.449

Item Notes

00 A basketball team played 80 games in one season.

- The team won 14 of its first 20 games.
- The team won a total of 65% of the games that season.

What is the number of games won by this basketball team after the first 20 games?

- A) 66
- B) 52
- C) 42
- D) 38

Item Information	
2012 WyCPS Domain:	Expressions and Equations
2012 WyCPS Cluster:	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.
2012 WyCPS Standard:	7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.
Item Code:	VH147975

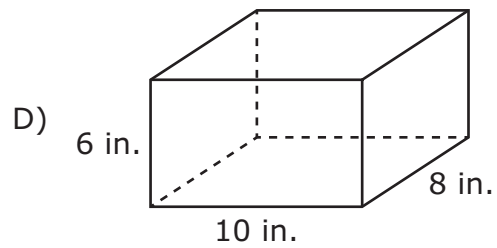
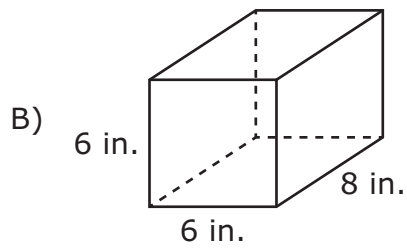
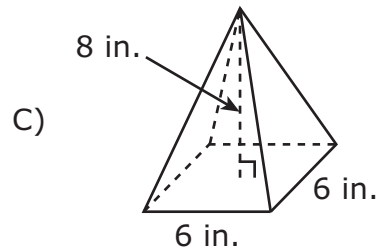
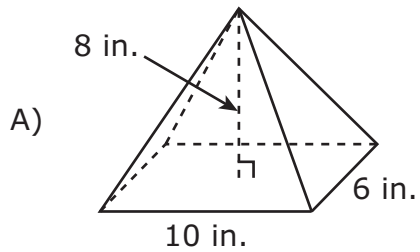
Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2015	MC	D	2	689	0.248

Score Analysis					
MC	A	B	C	D*	Omit
%Choosing	14.659	34.543	25.689	24.819	0.29

Item Notes

00

The two-dimensional figure that resulted from slicing a three-dimensional solid with a plane was a square. Which of these could not represent the three-dimensional solid?



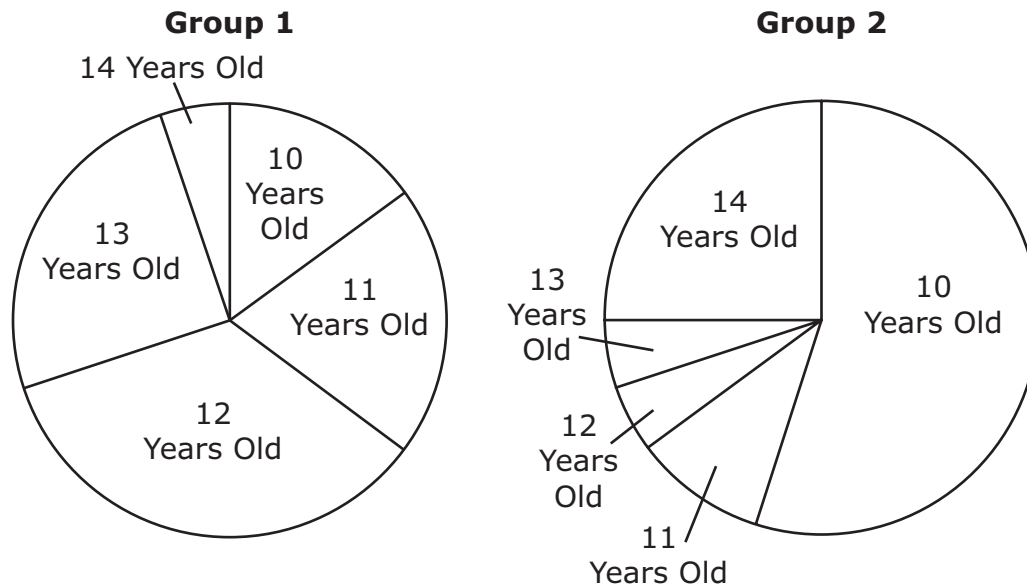
Item Information					
2012 WyCPS Domain:	Geometry				
2012 WyCPS Cluster:	Draw, construct, and describe geometrical figures and describe the relationships between them.				
2012 WyCPS Standard:	7.G.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.				
Item Code:	VH097777				
Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2015	MC	A	2	647	0.253

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	25.348	14.992	36.94	22.72	0

Item Notes

- 00** The circle graphs represent the ages, in years, of the members of two groups. Each group has 20 members.

AGES OF GROUP MEMBERS



Which statement is most likely true?

- A) The mean age of Group 1 is less than the mean age of Group 2.
- B) The median age of Group 2 is greater than the median age of Group 1.
- C) The mean absolute deviation of the ages of Group 1 is less than the mean absolute deviation of the ages of Group 2.
- D) The mean absolute deviation of the ages of Group 1 is greater than the mean absolute deviation of the ages of Group 2.

Item Information	
2012 WyCPS Domain:	Statistics and Probability
2012 WyCPS Cluster:	Draw informal comparative inferences about two populations.
2012 WyCPS Standard:	7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.
Item Code:	VF867365

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	C	3	677	0.272

Score Analysis					
MC	A	B	C*	D	Omit
%Choosing	17.725	28.065	27.179	26.883	0.148

Item Notes