



DEPARTMENT OF EDUCATION

PAWS
Mathematics
Grade 7
Released Items
With Data

Expressions and Equations

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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 square picture frame will be centered on a square wall. The width of the frame is $18\frac{3}{4}$ inches and the width of the wall is $57\frac{1}{2}$ inches. Which measure is closest to the minimum distance between an edge of the frame and an edge of the wall?

- A) 39 in.
- B) 29 in.
- C) 19 in.
- D) 10 in.

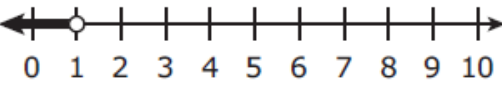
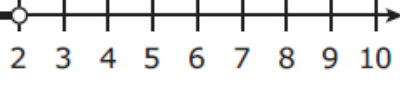
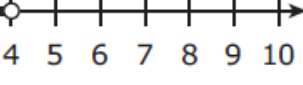
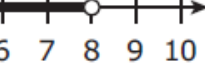
Item Information					
2012 WyCPS Domain:	Expressions and Equations				
2012 WyCPS Cluster:	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.				
2012 WyCPS Standard:	7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative 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 $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ 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:	VF492772				
Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	C	2	668	0.208

Score Analysis					
MC	A	B	C*	D	Omit
%Choosing	52.246	20.359	20.808	6.437	0.15

00 An inequality is shown.

$$\frac{1}{2}x + 1 < 3$$

Which graph best represents the solution set to this inequality?

- A) 
- B) 
- C) 
- D) 

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.4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
Item Code:	VF883220

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	C	2	677	0.343

Score Analysis					
MC	A	B	C*	D	Omit
%Choosing	17.43	39.586	34.269	8.567	0.148

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

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 $9\frac{3}{4}$ inches long in the center of a door that is 27 $\frac{1}{2}$ 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