



DEPARTMENT OF EDUCATION

# **PAWS**

# **Mathematics**

# **Grade 7**

## **Released Items**

## **With Data**

**Ratios and Proportional Relationships**

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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** The staff at a car dealership sold 56 cars in March. If the total sales in April increase by at least 20%, the staff will earn a bonus. What is the minimum number of cars the staff will need to sell in April to earn the bonus?

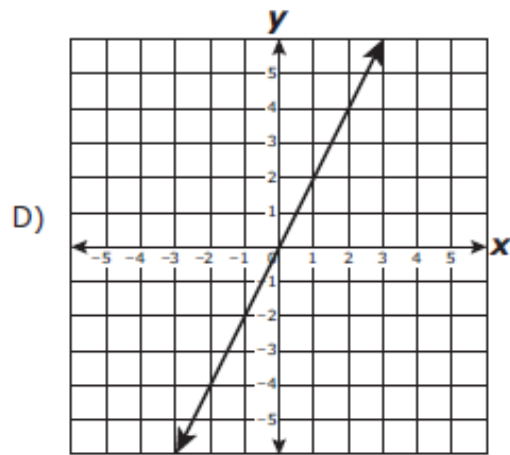
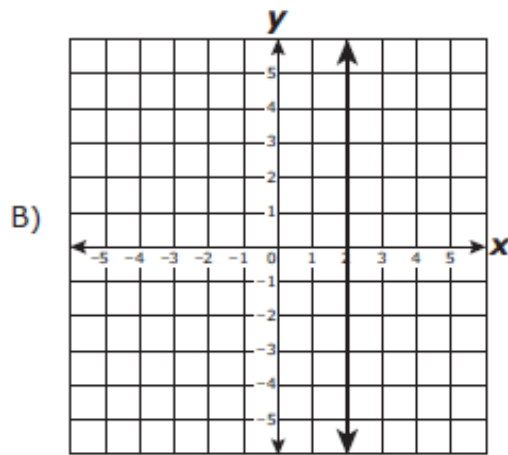
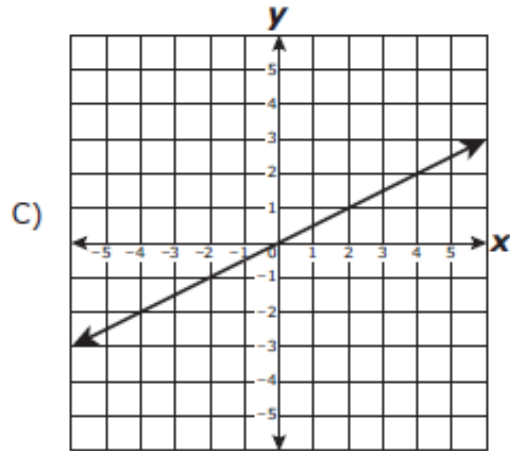
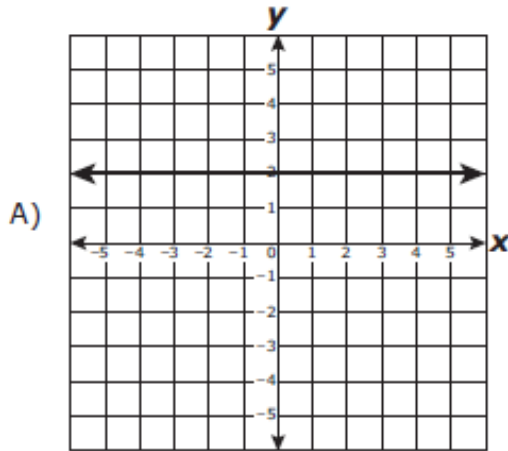
- A) 68
- B) 67
- C) 12
- D) 11

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.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
Item Code:	VF492629

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2013	MC	A	2	660	0.294

Score Analysis					
MC	A*	B	C	D	Omit
%Choosing	29.394	34.545	19.242	16.364	0.455

**00** Which graph shows a proportional relationship between  $x$  and  $y$  with a constant of proportionality of 2?



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.2 Recognize and represent proportional relationships between quantities.
Item Code:	VF819535

Admin:	Item Type:	Correct Answer:	Item Dok:	Total N-count:	Pvalue/Mean Score:
Spring 2014	MC	D	1	650	0.212

Score Analysis					
MC	A	B	C	D*	Omit
%Choosing	26.462	30.308	21.846	21.231	0.154

**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