



**CALIFORNIA ASSESSMENT OF STUDENT
PERFORMANCE AND PROGRESS**

California Alternate Assessment

**Practice Items
Scoring Guide:
Mathematics—
Grade Eleven**



California Assessment of
Student Performance and Progress

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California Alternate Assessment Practice Items Scoring Guide: Mathematics—Grade Eleven

Table of Contents

Introduction to Practice Test Scoring Guide.....	1
Grade Eleven Practice Test Items	2

Introduction to Practice Test Scoring Guide

The California Alternate Assessment Mathematics Practice Test Scoring Guides provide details about the items, student response types, correct responses, and related scoring considerations for the California Alternate Assessment Practice Test items. The items selected for the Practice Test are designed to reflect

- a broad coverage of claims and targets that closely mirror the summative blueprint.
- a range of student response types.
- a breadth of difficulty levels across the items, ranging from easier to more difficult items.

It is important to note that all student response types are not fully represented on every practice test, but a distribution can be observed across all the practice tests. The items presented are reflective of refinements and adjustments to language based on pilot test results and expert recommendations from both content and accessibility perspectives.

Within this guide, each item is presented with the following information:

- Grade: Grade level for the item
- Category: a broad content area that contains related targets and standards (i.e., Writing)
- Core Content Connector (Connector): Alternative achievement standard linked to a Common Core State Standard (CCSS)
- Tier: Level that identifies the complexity of an item. Tiers levels are 1, 2, and 3.
- Static presentation of the item: static presentation of item from test administration system
- Static presentation of student response field(s): static presentation of response field from test administration system
- Answer key or exemplar: expected student response or example response from score point value
- Rubric and applicable score points for each item: score point representations for student responses

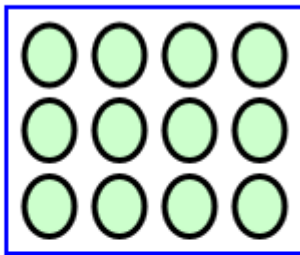
The following items are representative of the kinds of items that students can expect to experience when taking California Alternate Mathematics Assessment.

Grade Eleven Practice Test Items

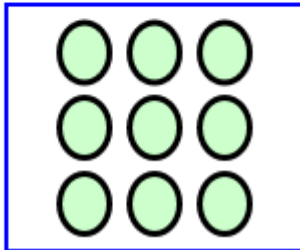
Item	Grade	Category	Connector	Tier
1	11	Number and Quantity: The Real Number System	HS.NO.1a1 Simplify expressions that include exponents.	1

Which of these represents 3×3 ?

Ⓐ



Ⓑ



Key: B

Rubric: (1 point) The student selects the correct response.

Item	Grade	Category	Connector	Tier
2	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1c1 Use descriptive stats; range, median, mode, mean, outliers/gaps to describe data set.	2

Look at this set of numbers.

{2, 5, 5, 6, 8, 9, 14}

What is the middle number of this set?

- Ⓐ 5
- Ⓑ 6
- Ⓒ 7

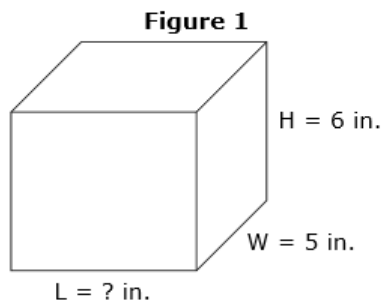
Key: B

Rubric: (1 point) The student selects the correct response.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
3	11	Algebra: Creating Equations	H.ME.1b2 Solve a linear equation to find a missing attribute given the area, surface area, or volume and the other attribute.	3

Look at Figure 1.

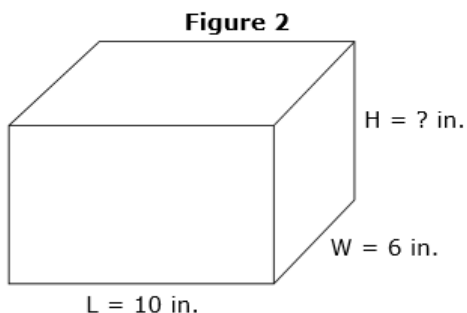


Volume = 210 cu in.

$$210 = \underline{\quad} \times 5 \times 6$$

The length is inches.

Look at Figure 2.



Volume = 360 cu in.

$$360 = 6 \times 10 \times \underline{\quad}$$

The height is inches.

Key: 7, 6

Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Item	Grade	Category	Connector	Tier
4	11	Functions: Interpreting Functions	H.PRF. 2c1 Make predictions based on a given model (for example, a weather model, data for athletes over years).	2

Look at this table.

Plant Growth

Times Watered per Week	Height (inches)	Distance Around (inches)
1	12	24
2	13	?
3	14	28
4	?	30

The height of the plant that was watered 4 times per week was inches.

The distance around the plant that was watered 2 times per week was inches.

Key: 15, 26

Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

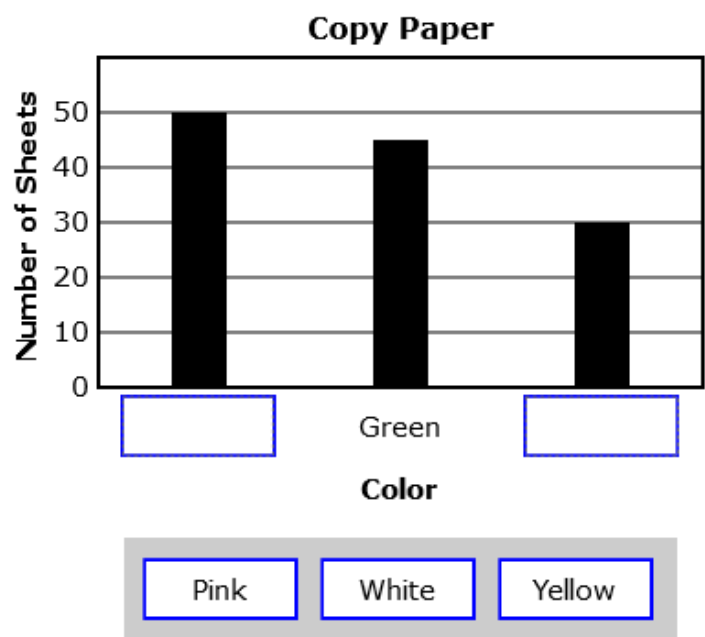
Item	Grade	Category	Connector	Tier
5	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1b1 Complete a graph given the data, using dot plots, histograms, or box plots.	2

Look at this table.

Copy Paper

Color	Number of Sheets
White	50
Green	45
Pink	30

This bar graph matches the table. Which labels complete the bar graph?



Key: White, Pink

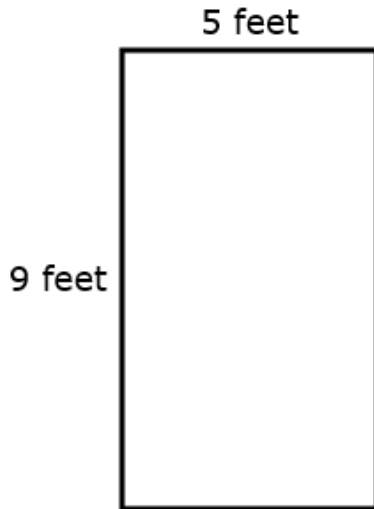
Rubric:

(2 point) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Item	Grade	Category	Connector	Tier
6	11	Number and Quantity: Quantities	H.ME.1a2 Solve real world problems involving units of measurement.	3

Look at this rectangle.



1 yard = 3 feet
1 foot = 12 inches

Part A

The rectangle is 5 feet wide. How wide is the rectangle in inches?

inches

Part B

The rectangle is 9 feet long. Which number sentence shows how to find the length of the rectangle in yards?

- (A) $9 \times 3 = 27$
- (B) $9 - 3 = 6$
- (C) $9 \div 3 = 3$

Key: 60, C

Rubric:

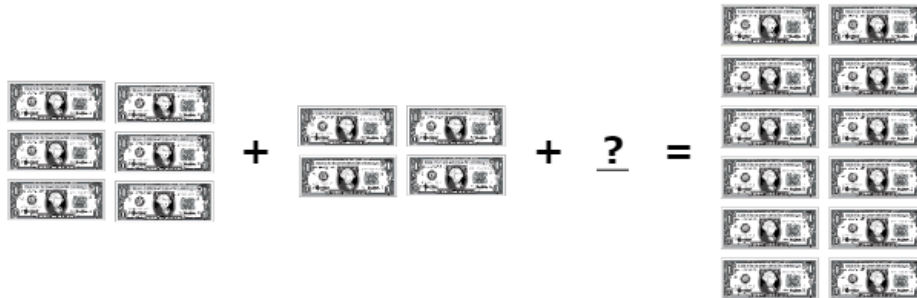
(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
7	11	Algebra: Creating Equations	H.PRF.2b1 Translate a real-world problem into a one-variable linear equation.	2

A student had \$6. Then she found \$4. She needs more money to buy a book for \$12.



Which number sentences can be used to find how much more money she needs? Choose two.

- $10 - ? = 12$
- $10 + ? = 12$
- $6 + 4 + ? = 12$
- $6 - 4 + ? = 12$

Key: See exemplar.

Exemplar:

- $10 - ? = 12$
- $10 + ? = 12$
- $6 + 4 + ? = 12$
- $6 - 4 + ? = 12$

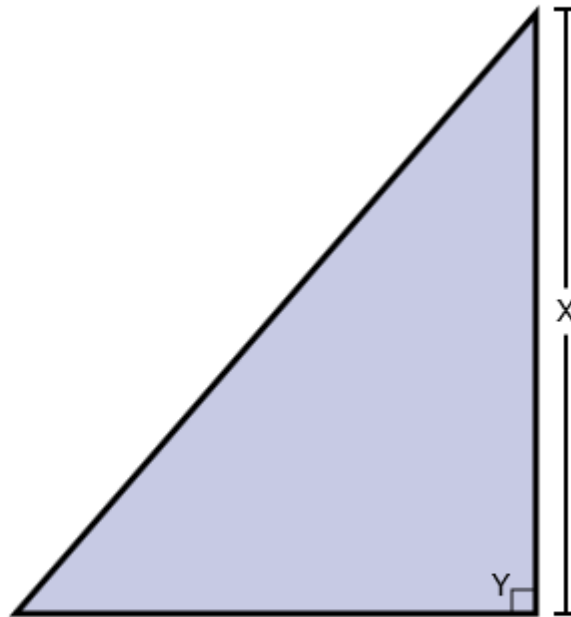
Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Item	Grade	Category	Connector	Tier
8	11	Geometry: Similarity, Right Triangles, and Trigonometry	H.GM.1b1 Use definitions to demonstrate congruency and similarity in figures.	1

Which letter shows the side of the triangle?



- (A) X
- (B) Y

Key: A

Rubric: (1 point) The student selects the correct response.

Grade Eleven Practice Test Items

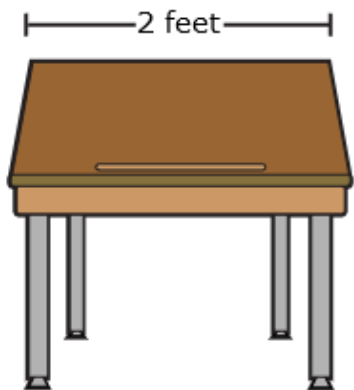
Item	Grade	Category	Connector	Tier
9	11	Number and Quantity: Quantities	H.ME.1a2 Solve real world problems involving units of measurement.	2

Look at this table.

Feet to Inches

Feet	Inches
1	12
2	24
3	36

This desk is 2 feet wide.



Part A

How many inches wide is the desk?

- (A) 12
- (B) 24
- (C) 36

Part B

What is the total width of 4 desks?

- (A) 8 inches
- (B) 48 inches
- (C) 96 inches

Key: B, C

Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Item	Grade	Category	Connector	Tier
10	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1c1 Use descriptive stats; range, median, mode, mean, outliers/gaps to describe data set.	2

Look at this table.

Apple Sales

Day	Number of Apples
Monday	8
Tuesday	5
Wednesday	8
Thursday	5
Friday	4

The average number of apples sold each day was **.**

Key: 6

Rubric: (1 point) The student selects the correct response.

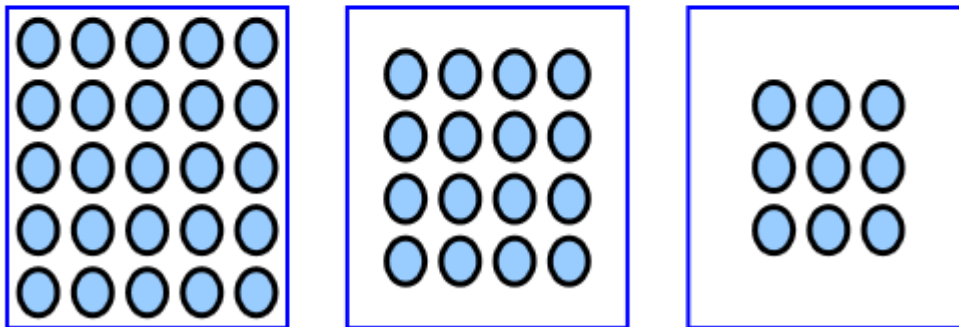
Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
11	11	Number and Quantity: The Real Number System	HS.NO.1a1 Simplify expressions that include exponents.	2

Look at this number sentence.

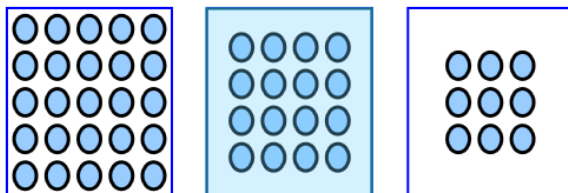
$$4^2 = 4 \times 4$$

Which picture shows 4^2 circles?



Key: See exemplar.

Exemplar:



Rubric: (1 point) The student selects the correct response.

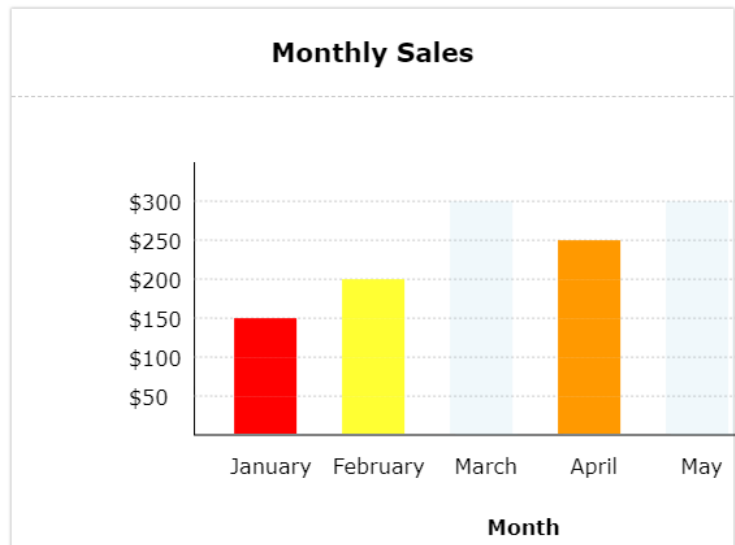
Item	Grade	Category	Connector	Tier
12	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1b1 Complete a graph given the data, using dot plots, histograms, or box plots.	3

Look at this table.

Monthly Sales

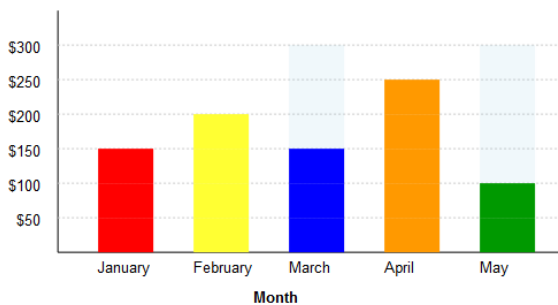
Month	Total Sales (\$)
January	150
February	200
March	150
April	250
May	100

Finish this bar graph for March and May so that it matches the table.



Key: See exemplar.

Exemplar:



Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
13	11	Number and Quantity: The Real Number System	HS.NO.1a1 Simplify expressions that include exponents.	3

Look at this number sentence.

$$2^3 = 2 \times 2 \times 2$$

What is the value of 5^3 ?

$$5^3 = \square$$

8

15

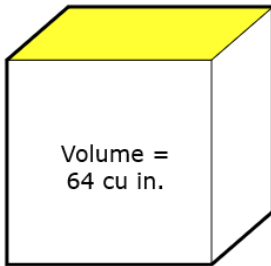
125

Key: 125

Rubric: (1 point) The student selects the correct response.

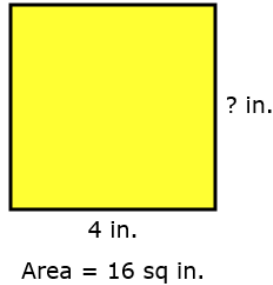
Item	Grade	Category	Connector	Tier
14	11	Algebra: Creating Equations	H.ME.1b2 Solve a linear equation to find a missing attribute given the area, surface area, or volume and the other attribute.	2

Look at this cube.



Part A

Here is the top of the cube.



The area of the top of the cube is 16 square inches.

$$\boxed{?} \times 4 = 16$$

How long is the missing side of the top of the cube?

- (A) 4 inches
- (B) 8 inches
- (C) 16 inches

Part B

The volume of the cube is 64 cubic inches.

Which number is missing in this math problem?

$$4 \times \boxed{} = 64$$

- 8
 16
 32

Key: A, 16

Rubric:

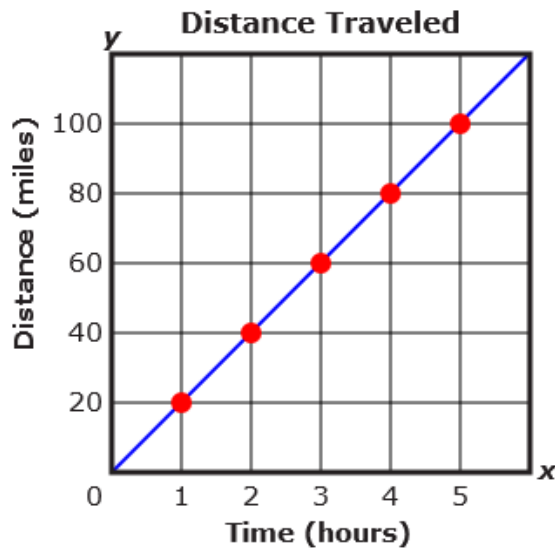
(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
15	11	Functions: Interpreting Functions	H.PRF.1c1 Select the appropriate graphical representation of a linear model based on real world events.	3

Look at this graph.



This table is based on the graph.

Time (hours)	Distance (miles)
1	20
2	40
3	?
4	80
5	100

What number is missing from the table?

miles

Key: 60

Rubric: (1 point) The student enters the correct response.

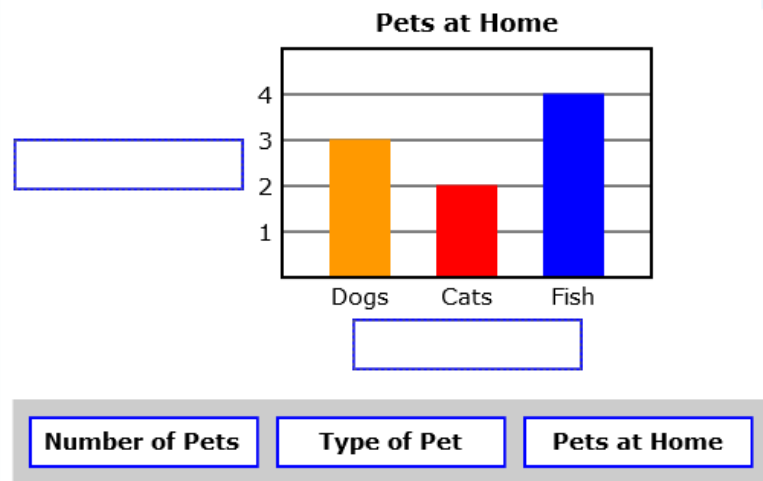
Item	Grade	Category	Connector	Tier
16	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1b1 Complete a graph given the data, using dot plots, histograms, or box plots.	1

This table shows the type and number of pets at home.

Pets at Home

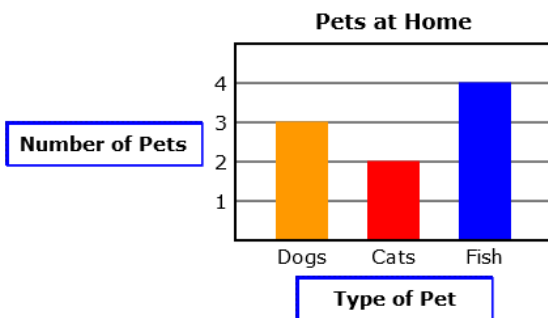
Type of Pet	Number of Pets
Dogs	3
Cats	2
Fish	4

This bar graph matches the table. What is the label for each axis?



Key: See exemplar.

Exemplar:



Rubric:

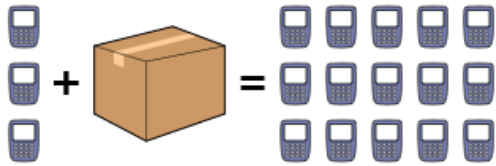
(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
17	11	Algebra: Creating Equations	H.PRF.2b1 Translate a real-world problem into a one-variable linear equation.	1

A teacher had 3 calculators. He bought a box of new calculators and then had 15 calculators.



Which number sentences can be used to find the number of calculators in the box? Choose two.

$$3 + 15 = ?$$

$$3 + ? = 15$$

$$? + 15 = 3$$

$$? + 3 = 15$$

Key: See exemplar.

Exemplar:

$$3 + 15 = ?$$

$$3 + ? = 15$$

$$? + 15 = 3$$

$$? + 3 = 15$$

Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Item	Grade	Category	Connector	Tier
18	11	Geometry: Similarity, Right Triangles, and Trigonometry	H.GM.1b1 Use definitions to demonstrate congruency and similarity in figures.	2

Look at these triangles.



Which sentence is true?

- A The triangles are the same shape and same size.
- B The triangles are the same shape but different sizes.
- C The triangles are neither the same shape nor the same size.

Key: B

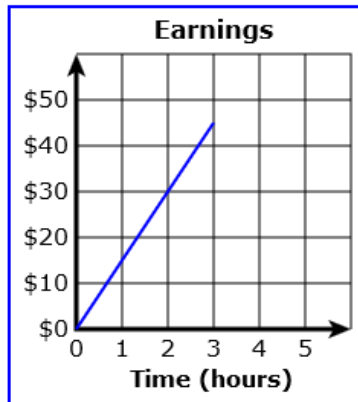
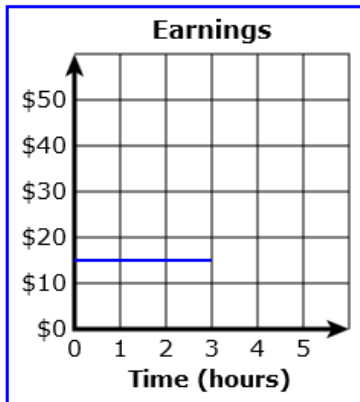
Rubric: (1 point) The student selects the correct response.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
19	11	Functions: Interpreting Functions	H.PRF.1c1 Select the appropriate graphical representation of a linear model based on real world events.	2

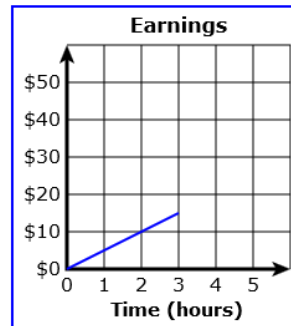
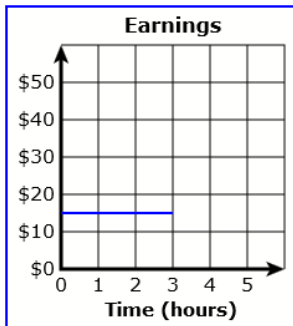
A student makes \$15 each hour she works at her job. She worked for 3 hours.

Which graph shows how much money she made?



Key: See exemplar.

Exemplar:



Rubric: (1 point) The student selects the correct response.

Item	Grade	Category	Connector	Tier
20	11	Algebra: Creating Equations	H.ME.1b2 Solve a linear equation to find a missing attribute given the area, surface area, or volume and the other attribute.	1

Look at this picture.



Length = 3 in.

Width = ? in.

Area = 6 sq in.

Part A

$$\text{Area} = L \times W$$

$$6 = 3 \times ?$$

What is the width of the rectangle?

- (A) 2 inches
- (B) 6 inches

Part B

The area of a different rectangle is 16 square inches. The length is 4 inches.

$$16 = 4 \times ?$$

What is the width of this rectangle?

- (A) 4 inches
- (B) 16 inches

Key: A, A

Rubric:

(2 points) The student selects the two correct responses.

(1 point) The student selects one of the correct responses, but not both.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
21	11	Number and Quantity: The Real Number System	HS.NO.1a1 Simplify expressions that include exponents.	2

A student earned 9^2 points on a test.

$$9^2 = 9 \times 9$$

How many points did the student earn?

- 11 18 81

Key: 81

Rubric: (1 point) The student selects the correct response.

Item	Grade	Category	Connector	Tier
22	11	Statistics and Probability: Interpreting Categorical and Quantitative Data	H.DPS.1c1 Use descriptive stats; range, median, mode, mean, outliers/gaps to describe data set.	3

Look at this set of numbers.

{5, 10, 11, 13, 17}

What is the difference between the greatest number and the least number in the set?

Key: 12

Rubric: (1 point) The student enters the correct response.

Item	Grade	Category	Connector	Tier
23	11	Algebra: Creating Equations	H.PRF.2b2 Solve equations with one or two variables using equations or graphs.	2

**A student has 120 yellow cards and some blue cards.
The student has a total of 183 cards.**

$$\mathbf{120 + ? = 183}$$

How many of the cards are blue?

- Ⓐ 63
- Ⓑ 120
- Ⓒ 303

Key: A

Rubric: (1 point) The student selects the correct response.

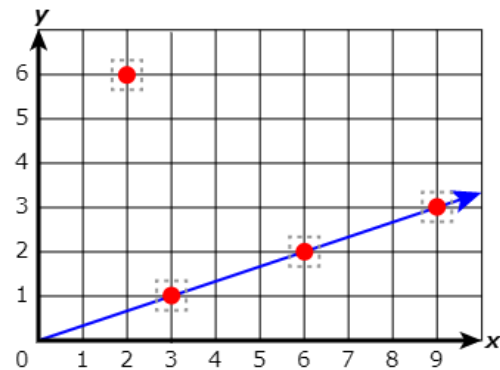
Item	Grade	Category	Connector	Tier
24	11	Functions: Interpreting Functions	H.PRF.1c1 Select the appropriate graphical representation of a linear model based on real world events.	1

Look at this table.

x	y
3	1
6	2
9	3

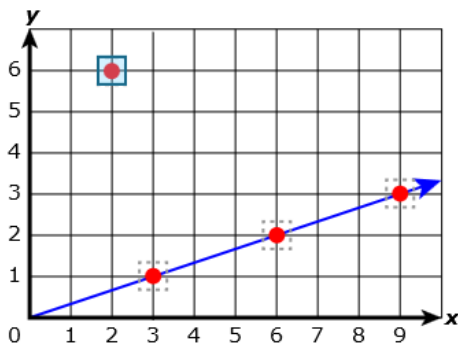
The points from the table are shown on the graph. There is an extra point.

Choose the point that is not in the table.



Key: See exemplar.

Exemplar:



Rubric: (1 point) The student selects the correct response.

Grade Eleven Practice Test Items

Item	Grade	Category	Connector	Tier
25	11	Algebra: Creating Equations	H.PRF.2b2 Solve equations with one or two variables using equations or graphs.	1

Here are 5 mugs.

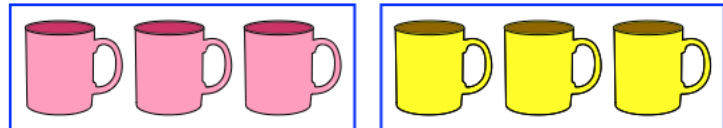


Which picture shows the 5 mugs in 2 groups?

(A)



(B)



Key: A

Rubric: (1 point) The student selects the correct response.