



**CALIFORNIA ASSESSMENT OF STUDENT  
PERFORMANCE AND PROGRESS**

**California Alternate Assessment**

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



California Assessment of  
Student Performance and Progress

© California Department of Education  
Prepared by Educational Testing Service ©  
Posted November 2019



*Measuring the Power of Learning.™*

# California Alternate Assessment Practice Items Scoring Guide: Mathematics—Grade Eight

## Table of Contents

Introduction to Practice Test Scoring Guide.....	1
Grade Eight 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:

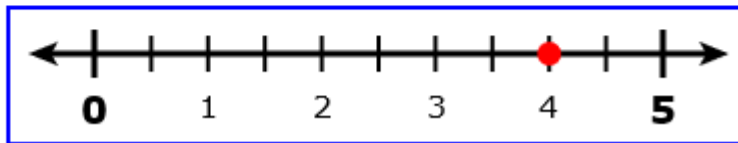
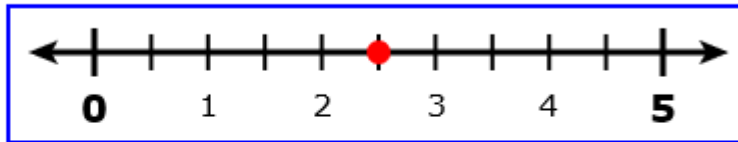
- Grade: Grade level for the item
- Category: a broad content area that contains related targets and standards (i.e., Writing)
- Core Content Connector (Connector): Alternative achievement standard linked to a Common Core State Standard (CCSS)
- Tier: Level that identifies the complexity of an item. Tier 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 Eight Practice Test Items

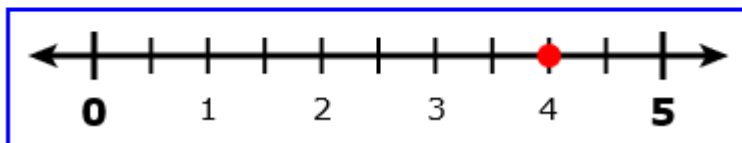
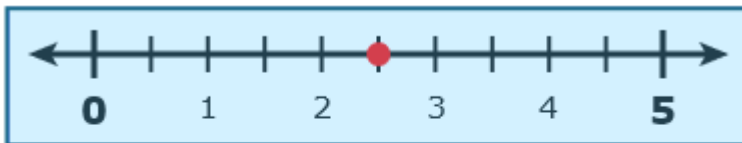
Item	Grade	Category	Connector	Tier
1	8	The Number System	8.NO.1k3 Use approximations of irrational numbers to locate them on a number line.	1

**Which number line shows 2.5?**



**Key:** See exemplar.

**Exemplar:**



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

Item	Grade	Category	Connector	Tier
2	8	Expressions and Equations	8.PRF.1e2 Represent proportional relationships on a line graph.	3

Look at this table.

T-shirt Sale

Number of T-shirts	Cost (\$)
1	10
2	20
3	30

Which points would appear on a graph of this relationship? Choose two.

- (1, 2)
- (2, 20)
- (3, 30)
- (30, 20)

**Key:** See exemplar.

**Exemplar:**

- (1, 2)
- (2, 20)
- (3, 30)
- (30, 20)

**Rubric:**

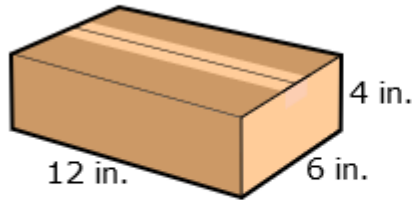
(2 points) The student selects the two correct responses.

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
3	8	Geometry	8.ME.2d2 Apply the formula to find the volume of 3-dimensional shapes (i.e., cubes, spheres, and cylinders).	2

**Look at this box.**



$$\text{Volume} = L \times W \times H$$

$$\text{Volume} = 12 \times 6 \times 4$$

**What is the volume of the box?**

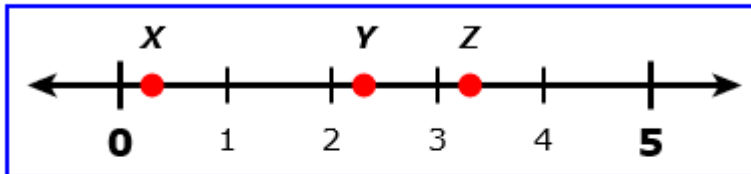
- (A) 22 cubic inches
- (B) 48 cubic inches
- (C) 288 cubic inches

**Key:** C

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

Item	Grade	Category	Connector	Tier
4	8	The Number System	8.NO.1k3 Use approximations of irrational numbers to locate them on a number line.	2

**Which point is closest to 3.3 on the number line?**



- (A) Point X
- (B) Point Y
- (C) Point Z

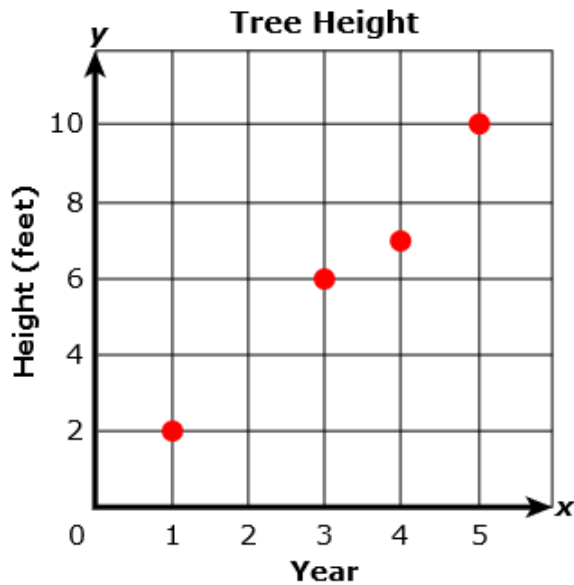
**Key:** C

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
5	8	Statistics and Probability	8.DPS.1k2 Analyze displays of bivariate data to develop or select appropriate claims about those data.	1

Look at this scatterplot.



Based on the scatterplot, the year goes

and the tree gets

.

**Key:** up, taller

**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	8	Expressions and Equations	8.PRF.1g3 Solve linear equations with 1 variable.	3

**What number makes this number sentence true?**

$$6 \times \boxed{\phantom{00}} = 54$$

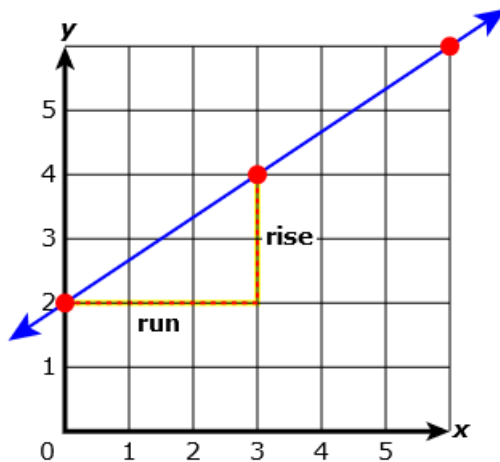
**Key:** 9 OR 09

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
7	8	Functions	8.PRF.2e2 Identify the rate of change (slope) and initial value (y-intercept) from graphs.	2

Look at this graph.



**Part A**

The line crosses the y-axis at .

(2, 0)  (0, 2)  (0, 0)

**Part B**

The rate of change of a line is  $\frac{\text{rise}}{\text{run}}$ .

The rate of change of this line is .

$\frac{0}{2}$    $\frac{2}{3}$    $\frac{3}{2}$

**Key:** (0, 2),  $\frac{2}{3}$

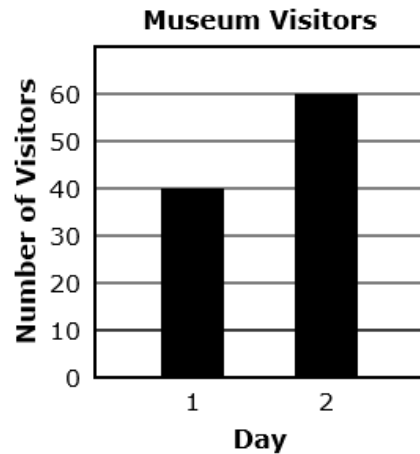
**Rubric:**

(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	8	Functions	8.PRF.1f2 Describe or select the relationship between the two quantities given a line graph of the situation.	1

Look at this bar graph.



**Part A**

On which day were there more visitors?

- A Day 1
- B Day 2

**Part B**

There were  visitors on Day 1.

**Key:** B, 40

**Rubric:**

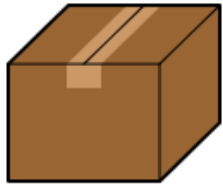
(2 points) The student selects the two correct responses.

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
9	8	Geometry	8.ME.1e1 Describe the changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings).	1

**Look at these boxes.**



Box A



Box B

The sides of Box A are  than the sides of Box B.

Box A has  space inside of it than Box B.

**Key:** longer, more

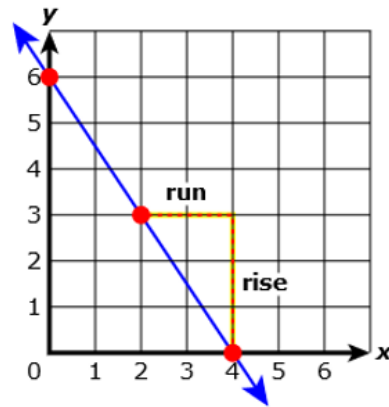
**Rubric:**

(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	8	Functions	8.PRF.2e2 Identify the rate of change (slope) and initial value (y-intercept) from graphs.	3

Look at this graph.



What is the rate of change of the line?

- (A)  $-\frac{3}{4}$
- (B)  $-\frac{2}{3}$
- (C)  $-\frac{3}{2}$

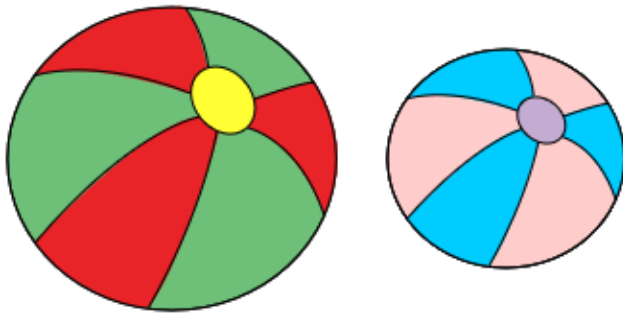
**Key:** C

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
11	8	Geometry	8.GM.1g1 Recognize congruent and similar figures.	1

**Look at these beach balls.**



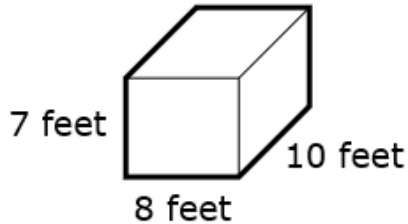
**These beach balls are**  .

**Key:** the same shape only

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

Item	Grade	Category	Connector	Tier
12	8	Geometry	8.ME.1e1 Describe the changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings).	3

Look at this box.



$$\text{Volume} = L \times W \times H$$

**Part A**

**If the width of the box changes from 10 feet to 5 feet, what will happen to the volume?**

- (A) It will decrease.
- (B) It will increase.
- (C) It will stay the same.

**Part B**

**If the height of the box changes from 7 feet to 8 feet, what will happen to the volume?**

- (A) It will decrease.
- (B) It will increase.
- (C) It will stay the same.

**Key:** A, B

**Rubric:**

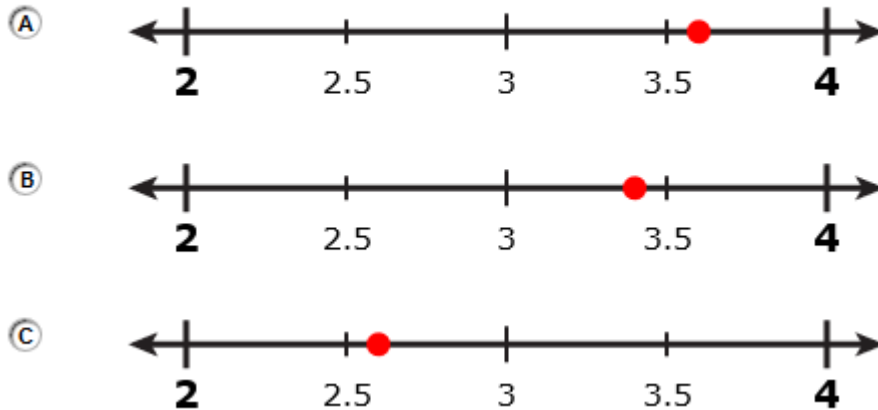
(2 points) The student selects the two correct responses.

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

## Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
13	8	The Number System	8.NO.1k3 Use approximations of irrational numbers to locate them on a number line.	3

**Which number line shows a point closest to 3.6?**



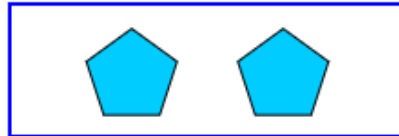
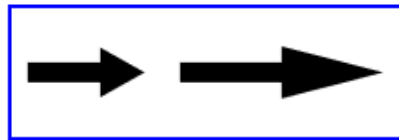
**Key:** A

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



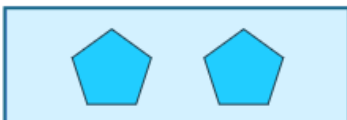
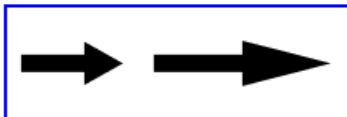
Item	Grade	Category	Connector	Tier
14	8	Geometry	8.GM.1g1 Recognize congruent and similar figures.	2

**Choose the set that has shapes that are the same size and the same shape.**



**Key:** See exemplar.

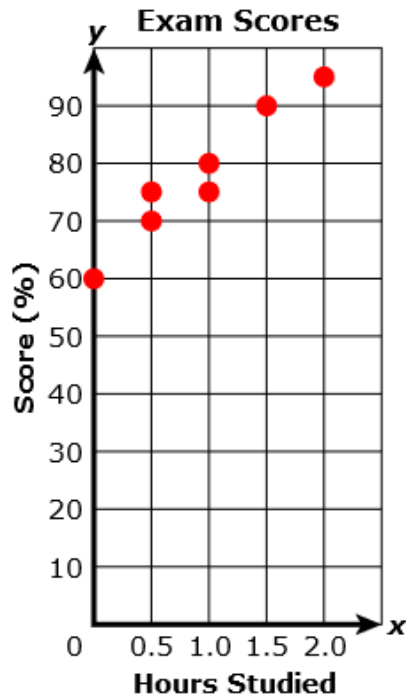
**Exemplar:**



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

Item	Grade	Category	Connector	Tier
15	8	Statistics and Probability	8.DPS.1k2 Analyze displays of bivariate data to develop or select appropriate claims about those data.	3

**Look at this scatterplot.**



**Based on the scatterplot, which sentences are true? Choose two.**

- All of the students studied.
- None of the students scored less than 60%.
- The students who studied more usually had higher scores.
- All of the students who studied for 1 hour or more scored 80% or higher.

**Key:** See exemplar.

**Exemplar:**

- All of the students studied.
- None of the students scored less than 60%.
- The students who studied more usually had higher scores.
- All of the students who studied for 1 hour or more scored 80% or higher.

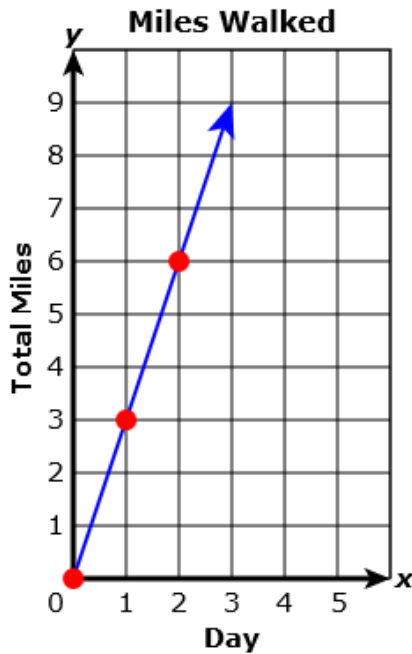
**Rubric:**

(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
16	8	Expressions and Equations	8.PRF.1e2 Represent proportional relationships on a line graph.	2

**This graph shows the total number of miles a teacher has walked.**



**Which sentences are true? Choose two.**

- The number of days and the total miles both increase.
- The teacher walks 1 mile every 3 days.
- The line passes through (0, 0).
- The line passes through (6, 2).

**Key:** See exemplar.

**Exemplar:**

- The number of days and the total miles both increase.
- The teacher walks 1 mile every 3 days.
- The line passes through (0, 0).
- The line passes through (6, 2).

**Rubric:**

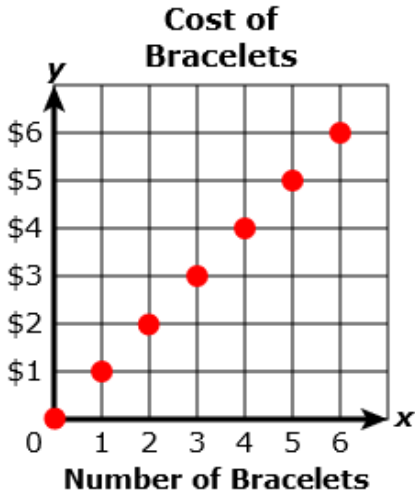
(2 points) The student selects the two correct responses.

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
17	8	Statistics and Probability	8.DPS.1h1 Graph bivariate data using scatter plots and identify possible associations between the variable.	2

Look at this scatterplot.



The cost of the bracelets, in dollars, is  the number of bracelets.

**Key:** equal to

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

Item	Grade	Category	Connector	Tier
18	8	Expressions and Equations	8.PRF.1g3 Solve linear equations with 1 variable.	2

**Which number makes this number sentence true?**

$$5 + \square = 8$$

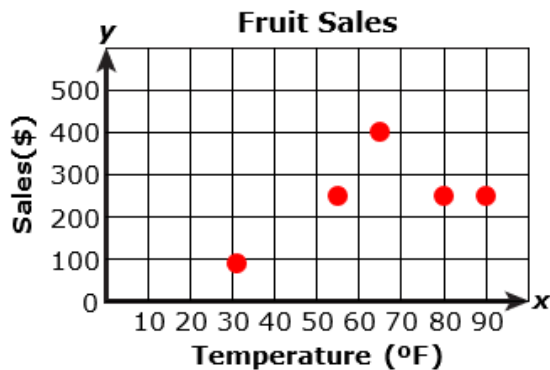
3    4    5

**Key:** 3

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

Item	Grade	Category	Connector	Tier
19	8	Statistics and Probability	8.DPS.1k2 Analyze displays of bivariate data to develop or select appropriate claims about those data.	2

Look at this scatterplot.



Based on the scatterplot, which sentences are true? Choose two.

- When the temperature rises, the sales always rise.
- The sales are \$400 when the temperature is between 50 and 60 degrees.
- The sales are lowest when the temperature is between 30 and 40 degrees.
- The sales are highest when the temperature is between 60 and 70 degrees.

**Key:** See exemplar.

**Exemplar:**

- When the temperature rises, the sales always rise.
- The sales are \$400 when the temperature is between 50 and 60 degrees.
- The sales are lowest when the temperature is between 30 and 40 degrees.
- The sales are highest when the temperature is between 60 and 70 degrees.

**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
20	8	Statistics and Probability	8.DPS.1h1 Graph bivariate data using scatter plots and identify possible associations between the variable.	3

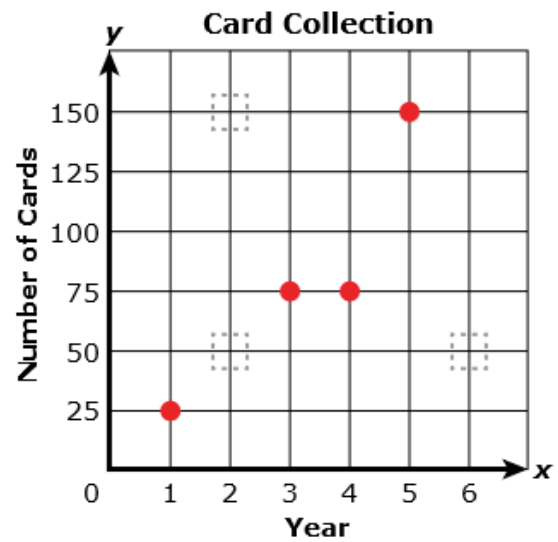
Look at this table.

Card Collection

Year	Number of Cards
1	25
2	50
3	75
4	75
5	150

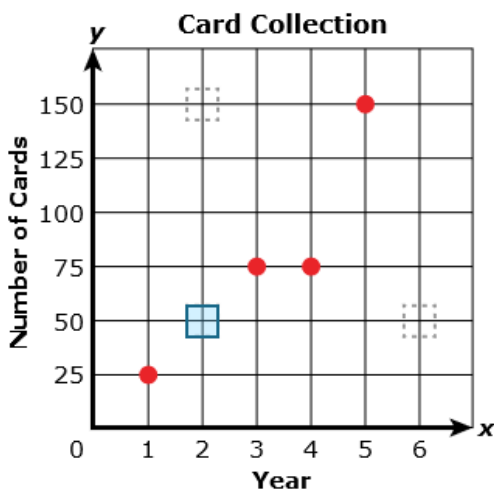
Here is a scatterplot that matches the table.

Where should the point for Year 2 go?



Key: See below.

Exemplar:

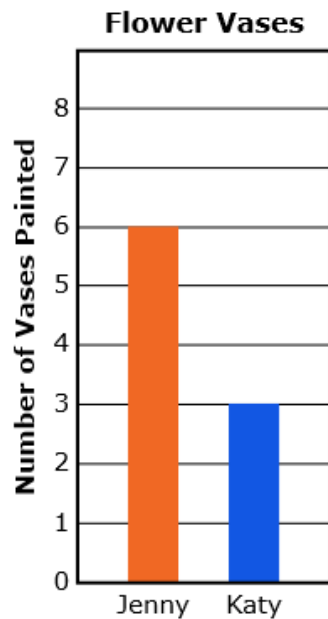


Rubric: (1 point) The student selects the correct response.

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
21	8	Functions	8.PRF.1f2 Describe or select the relationship between the two quantities given a line graph of the situation.	1

Look at this graph.



Katy painted  vases.

painted more vases.

**Key:** 3, Jenny

**Rubric:**

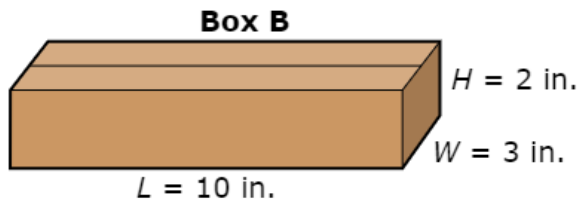
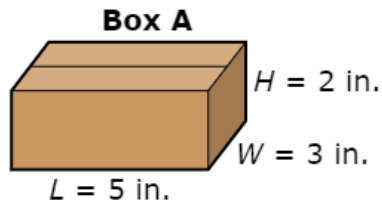
(2 points) The student selects the two correct responses.

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



Item	Grade	Category	Connector	Tier
22	8	Geometry	8.ME.1e1 Describe the changes in surface area, area, and volume when the figure is changed in some way (e.g., scale drawings).	2

Look at these boxes.



$$\text{Volume} = L \times W \times H$$

Which sentences are true? Choose two.

- Box A is wider than Box B.
- Box B is longer than Box A.
- The volume of Box A is more.
- The volume of Box B is more.

**Key:** See exemplar.

**Exemplar:**

- Box A is wider than Box B.
- Box B is longer than Box A.
- The volume of Box A is more.
- The volume of Box B is more.

**Rubric:**

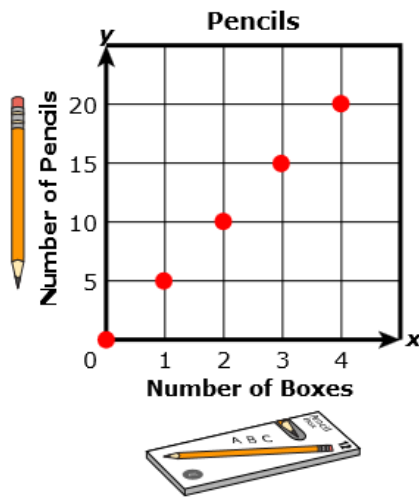
(2 points) The student selects the two correct responses.

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
23	8	Expressions and Equations	8.PRF.1e2 Represent proportional relationships on a line graph.	1

Look at this graph.



**Part A**

How many pencils are in 1 box?

- (A) 0
- (B) 5

**Part B**

4 boxes have  pencils than 2 boxes.

**Key:** B, more

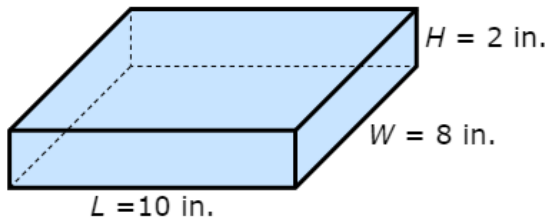
**Rubric:**

(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
24	8	Geometry	8.ME.2d2 Apply the formula to find the volume of 3-dimensional shapes (i.e., cubes, spheres, and cylinders).	2

Look at this box.



$$\text{Volume} = L \times W \times H$$

$$\text{Volume} = 10 \times 8 \times 2$$

The volume of this box is  cubic inches.

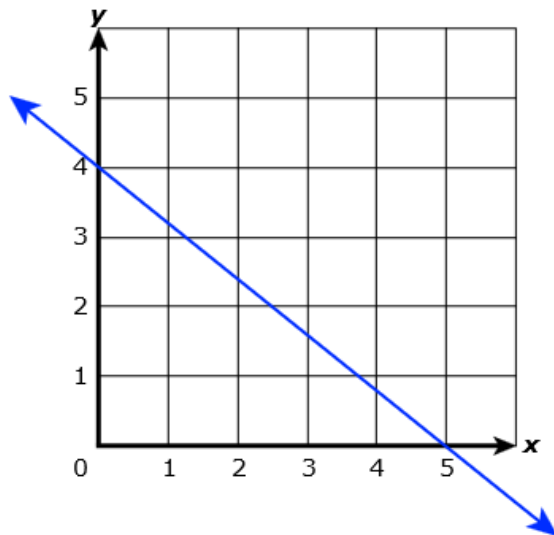
**Key:** 160

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

Grade Eight Practice Test Items

Item	Grade	Category	Connector	Tier
25	8	Functions	8.PRF.2e2 Identify the rate of change (slope) and initial value (y-intercept) from graphs.	1

**Look at this graph.**



The line crosses the y-axis at .

**Key:** 4

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