Name\_\_\_\_

### 2-Point Holistic Rubric

#### Score Points:

2 Points	A two-point response includes the correct solution to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task.  This response  indicates that the student has completed the task correctly, using mathematically sound procedures contains sufficient work to demonstrate a thorough		
	<ul> <li>understanding of the mathematical concepts and/or procedures</li> <li>may contain inconsequential errors that do not detract from the correct solution and the demonstration of a thorough understanding</li> </ul>		
1 Point	A one-point response demonstrates only a partial understanding of the mathematical concepts and/or procedures in the task.  This response		
	<ul> <li>correctly addresses only some elements of the task</li> <li>may contain an incorrect solution but applies a mathematically appropriate process</li> <li>may contain the correct solution but required work is incomplete</li> </ul>		
0 Points*	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.		

<sup>\*</sup> Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

#### 3-Point Holistic Rubric

## Score Points:

3 Points	A three-point response includes the correct solution(s) to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task.	
	This response	
	<ul> <li>indicates that the student has completed the task correctly, using mathematically sound procedures</li> <li>contains sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures</li> </ul>	
	• may contain inconsequential errors that do not detract from the correct solution(s) and the demonstration of a thorough understanding	
2 Points	A two-point response demonstrates a partial understanding of the mathematical concepts and/or procedures in the task.	
	This response	
	<ul> <li>appropriately addresses most, but not all, aspects of the task using mathematically sound procedures</li> </ul>	
	<ul> <li>may contain an incorrect solution but provides sound procedures, reasoning, and/or explanations</li> </ul>	
1	<ul> <li>may reflect some minor misunderstanding of the underlying mathematical concepts and/or procedures</li> </ul>	
1 Point	A one-point response demonstrates only a limited understanding of the mathematical concepts and/or procedures in the task.	
	This response	
	• may address some elements of the task correctly but reaches an inadequate solution and/or provides reasoning that is faulty or incomplete	
	<ul> <li>exhibits multiple flaws related to misunderstanding of important aspects of the task,</li> <li>misuse of mathematical procedures, or faulty mathematical reasoning</li> </ul>	
	<ul> <li>reflects a lack of essential understanding of the underlying mathematical concepts</li> <li>may contain the correct solution(s) but required work is limited</li> </ul>	
0 Points*	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.	

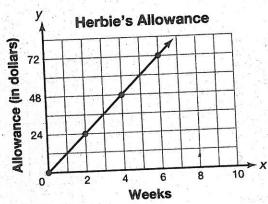
<sup>\*</sup> Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

# 2015 2- and 3-Point Mathematics Scoring Policies

Below are the policies to be followed while scoring the mathematics tests for all grades:

- 1. If a student does the work in other than a designated "Show your work" area, that work should still be scored. (Additional paper is an allowable accommodation for a student with disabilities if indicated on the student's Individual Education Program or Section 504 Accommodation Plan.)
- 2. If the question requires students to show their work, and the student shows appropriate work and clearly identifies a correct answer but fails to write that answer in the answer blank, the student should still receive full credit.
- 3. In questions that provide ruled lines for students to write an explanation of their work, mathematical work shown elsewhere on the page should be considered and scored.
- 4. If the student provides one legible response (and one response only), teachers should score the response, even if it has been crossed out.
- 5. If the student has written more than one response but has crossed some out, teachers should score only the response that has **not** been crossed out.
- 6. Trial-and-error responses are **not** subject to Scoring Policy #5 above, since crossing out is part of the trial-and-error process.
- 7. If a response shows repeated occurrences of the same conceptual error within a question, the student should **not** be penalized more than once.
- 8. In questions that require students to provide bar graphs,
  - in Grades 3 and 4 only, touching bars are acceptable
  - in Grades 3 and 4 only, space between bars does **not** need to be uniform
  - in all grades, widths of the bars must be consistent
  - in all grades, bars must be aligned with their labels
  - in all grades, scales must begin at 0, but the 0 does **not** need to be written
- 9. In questions requiring number sentences, the number sentences must be written horizontally.
- 10. In pictographs, the student is permitted to use a symbol other than the one in the key, provided that the symbol is used consistently in the pictograph; the student does not need to change the symbol in the key. The student may **not**, however, use multiple symbols within the chart, nor may the student change the value of the symbol in the key.
- 11. If students are not directed to show work, any work shown will not be scored. This applies to items that do not ask for any work and items that ask for work for one part and do not ask for work in another part.
- 12. Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted). This is not to be confused with a score of zero wherein the student does respond to part or all of the question but that work results in a score of zero.

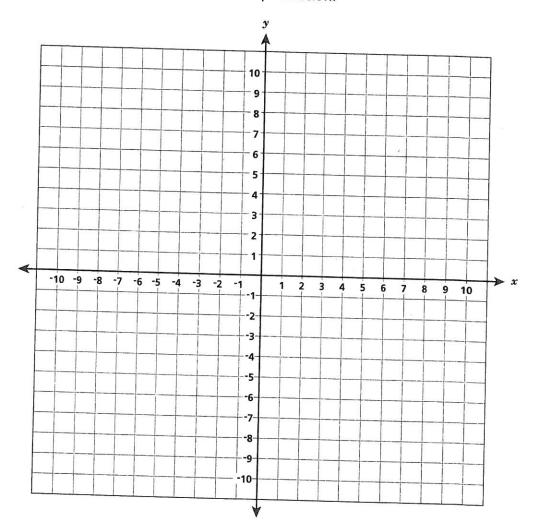
**50.** Each week, Herbie receives an allowance for helping with tasks around the house. Below is a graph that represents this situation.



Based on the graph, how much allowance does Herbie receive each month? (Assume that 4 weeks are a month.)

- A. \$24
- **B.** \$48
- **c.** \$60
- **D.** \$72

A certain function is defined as "multiply the input by  $-\frac{3}{4}$ , then add 2." Graph the function on the coordinate plane below.



. .

50

4

Determine the solution to the system of equations below.

$$x - 3y = 1$$
$$3x - 5y = 11$$

Show your work.

Answer \_\_\_\_

Show your work.

Answor

61	The table below	shows a relation	between x and	y.

x	y
-4	16
-2	4
0	0
2	4
4	16
6	36

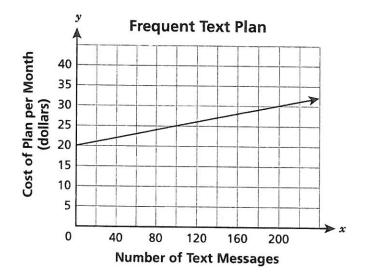
Susie said the relation above is also a function. Explain why Susie is correct or incorrect.

A customer is comparing two different text message plans at Cellular Bargains. He wants to find out which plan allows the most text messages for the same cost.

The Pay Per Text Plan charges \$10 per month and \$0.10 for each text message. Write a function that models this plan, stating what your variables represent.

Answer \_\_\_\_

The Frequent Text Plan is modeled by the graph shown below.



How many text messages would result in the same cost per month for the two plans?

Show your work.

Answer \_\_\_\_\_\_text messages

63 When  $\triangle ABC$  was dilated by a scale factor of 2, centered at the origin, the result was its image  $\triangle A'B'C'$  shown on the coordinate plane below. The vertices of  $\triangle A'B'C'$  are A'(-4, 4), B'(-4, 6), and C'(2, 4). B'--10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 > x -3 -8 What are the coordinates of the vertices of  $\triangle ABC$ ? **Vertices** A (\_\_\_\_, \_\_\_) B (\_\_\_\_, \_\_\_) C (\_\_\_\_, \_\_\_) Explain how you determined the coordinates of the vertices of  $\triangle ABC$ . Are  $\triangle ABC$  and  $\triangle A'B'C'$  congruent to each other, similar to each other, or neither? Explain how you determined your answer.

**64** Quadrilateral *ABCD* is graphed on a coordinate plane.

- Abby reflected ABCD over the x-axis and then rotated it 90° clockwise about the origin. She labeled the final image EFGH.
- Manny dilated *ABCD* by a scale factor of 3 and then translated the resulting figure 2 units left. He labeled the final image *PQRS*.

Identify a pair of quadrilaterals from the three quadrilaterals ABCD, EFGH, and PQRS that are congruent.

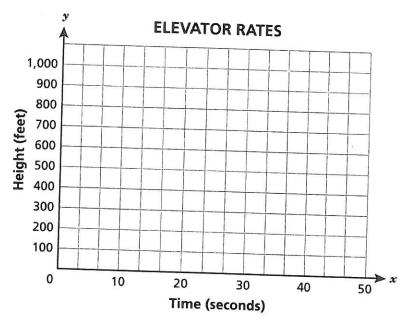
Answer
Identify a pair of quadrilaterals from the three quadrilaterals ABCD, EFGH, and PQRS that are similar but not congruent.
Answer
Describe a transformation on Abby's quadrilateral <i>EFGH</i> that would make the resulting image <i>E'F'G'H'</i> congruent to Manny's quadrilateral <i>PQRS</i> .

**65** The

The express elevator in the Empire State Building in New York City travels nonstop from the ground floor to the top floor at a rate of 1,400 feet per minute.

The express elevator in the John Hancock Center in Chicago travels nonstop from the ground floor to the observatory on the top floor at a rate represented by the equation y = 30x, where y is the height, in feet, and x is the number of seconds.

Graph the two relationships on the grid below to compare the rates of the two elevators.



Which elevator travels at a faster rate?

Using the information from the graph, explain how you got your answer.

Answer