For this item, a full-credit response (1 point) includes:

- $(2.71 \times 2)$, $(9.53 - 4.11)$, and $(2.36 + 3.06)$ in the “Equal to 5.42” column
  AND
- $(2.16 + 3.36)$, $(1.80 \times 3)$, and $(8.01 - 2.69)$ in the “Not Equal to 5.42” column
Bill wants to run a total of 4,000 meters in 5 days.
The table shows how far he runs each day for 4 days.
Each lap is 400 meters.

<table>
<thead>
<tr>
<th>Day of Week</th>
<th>Laps Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td>1 1/4</td>
</tr>
<tr>
<td>Tuesday</td>
<td>1 3/4</td>
</tr>
<tr>
<td>Wednesday</td>
<td>1 5/8</td>
</tr>
<tr>
<td>Thursday</td>
<td>2 1/2</td>
</tr>
</tbody>
</table>

How many laps should he run on Friday?

Drag numbers into the box to show your answer. The box can hold up to two drag elements.

For this item, a full-credit response (1 point) includes:

- \(2 \frac{7}{8}\) in the box
A landscape designer is planning the layout of trees in a park.
- There are two types of trees: elm and pine.
- There should be at least 16 total trees but no more than 30.
- The ratio of elm trees to pine trees will be 3:2.

Drag trees anywhere to the model to show a possible number of each type of tree.

For this item, a full-credit response (1 point) includes:

- 16 to 30 total trees
  AND
- 3 elm trees for every 2 pine trees
The following are the lengths in inches of twelve fish caught one day:

11, 13, 13, 13, 14, 14, 14, 15, 15, 16, 16

Use the Point tool to create a dot plot to display the data.

For this item, a full-credit response (1 point) includes:

- the correct dot plot as shown below
An equation is shown.
\[ \frac{2}{3} \times \frac{b}{a} = n \]
Sarah claims that for any fraction multiplied by \( \frac{2}{3} \), \( n \) will always be less than \( \frac{2}{3} \).

A. Drag one number into each box to complete an equation that supports Sarah’s claim.

B. Drag one number into each box to complete an equation that does not support Sarah’s claim.

For this item, a full-credit response (1 point) includes:

- a fraction less than 1 in part A
  AND
- a fraction greater than or equal to 1 in part B
Kate waters the garden every 3 days and weeds it every 4 days. She does both on April 2nd. What is the next date that she will both water and weed her garden? Select that date on the calendar.

For this item, a full-credit response (1 point) includes:

- selecting the date April 14
Juan has $7 \frac{1}{2}$ cups of chopped nuts. He wants to make either banana nut muffins or carrot muffins. The table shows how many cups of nuts are needed for each batch.

<table>
<thead>
<tr>
<th>Muffin Type</th>
<th>Chopped Nuts per Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana nut</td>
<td>$\frac{1}{2}$ cup</td>
</tr>
<tr>
<td>Carrot</td>
<td>$\frac{5}{8}$ cup</td>
</tr>
</tbody>
</table>

**Part A**

How many batches of banana nut muffins can Juan make if he makes only banana nut muffins?

For this item, a full-credit response (1 point) includes:

- the value 15
Juan has $7\frac{1}{2}$ cups of chopped nuts. He wants to make either banana nut muffins or carrot muffins. The table shows how many cups of nuts are needed for each batch.

<table>
<thead>
<tr>
<th>Muffin Type</th>
<th>Chopped Nuts per Batch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banana nut</td>
<td>$\frac{1}{2}$ cup</td>
</tr>
<tr>
<td>Carrot</td>
<td>$\frac{5}{8}$ cup</td>
</tr>
</tbody>
</table>

For this item, a full-credit response (1 point) includes:

- the value 12
For this item, a full-credit response (2 points) includes

- a value on the left that is greater than the value on the right for the first statement
  AND
- a value on the left that is less than the value on the right for the second statement
  AND
- a value on the left that is equal to the value on the right for the third statement

For example,

- $6 > -6$
  AND
- $-3 < |-2|$
  AND
- $7 = |7|$
For this item, a full-credit (1 point) response includes:

- 35.996 g, 36.004 g, and 36.102 g in the “Same Readings” column AND
- 36.011 g, 34.309 g, and 35.689 g in the “Different Readings” column
Robert recorded the temperature outside his house in the table shown.

<table>
<thead>
<tr>
<th>Time</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 p.m.</td>
<td>15</td>
</tr>
<tr>
<td>6:00 a.m.</td>
<td>-7</td>
</tr>
</tbody>
</table>

Robert claims the difference between the temperatures is 8 degrees.

For this item, an incorrect response (0 points) includes:

- an incorrect description of why Robert’s claim is incorrect

For example,

- “He subtracted 7 from 15 instead of −7.”
  OR
- “He added fifteen and negative seven instead of subtracting negative seven from 15.”
  OR
- “He didn’t take into account the fact that −7 is 7 below zero and 15 is 15 above zero.”

For this item, a full-credit response (1 point) includes:

- an accurate description of why Robert’s claim is incorrect

For example,

- “He subtracted 7 from 15 instead of −7.”

This item is not graded for spelling or grammar.
Robert recorded the temperature outside his house in the table shown.

<table>
<thead>
<tr>
<th>Time</th>
<th>Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 p.m.</td>
<td>15</td>
</tr>
<tr>
<td>6:00 a.m.</td>
<td>-7</td>
</tr>
</tbody>
</table>

Robert claims the difference between the temperatures is 8 degrees.

For this item, a full-credit response (1 point) includes:

- the value 22
For this item, a full-credit response (1 point) includes:

- a line segment from point A (−5, 2) to the point (7, 2)  
  AND  
- a line segment from point A (−5, 2) to the point B (1, 6)  
  AND  
- a line segment from point B (1, 6) to the point (7, 2)
For this item, a full-credit response (1 point) includes:

- $8t + 32$ and $(8 \times t) + (8 \times 4)$ in the “Equivalent to $8(t + 4)$” column AND
- $4(2t + 1)$, $4t + 4 + 4t$, and $2(4t + 2)$ in the “Equivalent to $8t + 4$” column
An artist is using red, blue, and green tiles to create a mosaic.

- The ratio of red tiles to total tiles should be 2:5.
- For every 2 blue tiles, there should be 1 green tile.

Drag tiles into the space to create a set of tiles the artist could use.

For this item, a full-credit response (2 points) includes:

- \( \frac{2}{5} \) of the total tiles being red
  AND
- \( \frac{2}{5} \) of the total tiles being blue
  AND
- \( \frac{1}{5} \) of the total tiles being green

For partial credit (1 point), a student creates a set that satisfies

- the first condition
  OR
- the last two conditions
For this item, a full-credit response (2 points) includes:

- \( \frac{4}{5} \) in the top box
  
  AND

- \( \frac{1}{2} \) in the middle box
  
  AND

- \( \frac{2}{5} \) in the bottom box

For partial credit (1 point), a student places any two fractions correctly.
Micah constructs a rectangular prism with a volume of 360 cubic units. The height of his prism is 10 units.

Micah claims that the base of the prism must be a square.

Use the Connect Line tool to draw a base that shows Micah’s claim is incorrect.

For this item, a full-credit response (1 point) includes a rectangle with one of the following sets of dimensions:

- 2 units by 18 units
- 3 units by 12 units
- 4 units by 9 units
Carlos has 2.4 meters of wire. He needs 1.7 meters for one project and 0.8 meter for another project.

Shade the model to represent the total amount of wire Carlos needs. Each full row represents 1.0 meter.

Does Carlos have enough wire? • If so, answer how much wire he will have left over. • If not, answer how much more he needs.

For this item, a full-credit response (2 points) includes:

- 25 sections of the model shaded to represent 2.5 meters of wire
- 0.1 in the bottom box

For partial credit (1 point), a student completes only one of the above tasks.
The trapezoid shown is divided into a right triangle and a rectangle.

For this item, a full-credit response (1 point) includes:

- an expression equivalent to \( \frac{1}{2} (3 \times h) + (h \times 6) \)
Two ordered pairs are shown on a coordinate grid.

Drag each ordered pair to its correct location on the coordinate grid.

- \((-a, b)\)
- \((a, -b)\)
- \((-c, -d)\)

For this item, a full-credit response (3 points) includes:

- point \((-a, b)\) at \((-2, 3)\)
  AND
- point \((a, -b)\) at \((2, -3)\)
  AND
- point \((-c, -d)\) at \((4, -2)\)

For partial credit, a student earns 1 point for every point placed correctly.
Ms. Stone buys groceries for a total of $45.32. She now has $32.25 left.

Which equation could be used to find out how much money Ms. Stone had before she bought the groceries?

- $45.32x = 32.25$
- $x - 45.32 = 32.25$
- $x + 45.32 = 32.25$
- $x + 32.25 = 45.32$

For this item, a full-credit response (1 point) includes:

- option B
For this item, a full-credit response (1 point) includes:

- “Variability in Data” next to “How many pets does each 6th grader have?” and “How old are the animals at the zoo?”
  AND
- “No Variability in Data” next to “How old is the athlete?”, “How many 6th graders attend our school?” and “How many baseball cards does the boy have?”
Look at the box-and-whisker plot of pumpkin weights.

What is the median pumpkin weight?

A  12 lb  
B  14 lb  
C  15 lb  
D  16 lb  

For this item, a full-credit response (1 point) includes:

- option C
For this item, a full-credit response (1 point) includes:

- a point at (2, 700)
  AND
- a point at (3, 1050)
Tana fills the prism shown with $110 \frac{1}{2}$ in$^3$ of liquid.

Select the height of the liquid in the prism.

For this item, a full-credit response (1 point) includes:

- the tank filled to the $8 \frac{1}{2}$ inch mark