

Math
Spring 2019

Grade 5
Released Items

1.

VH141430

Two patterns are shown.

Pattern A	2	4	6	8	10
Pattern B	12	24	36	48	60

Which statement about the corresponding terms in Pattern A and Pattern B is always true?

- A. The terms in Pattern B are 6 times the corresponding terms in Pattern A.
- B. The terms in Pattern B are 10 times the corresponding terms in Pattern A.
- C. The terms in Pattern B are 10 more than the corresponding terms in Pattern A.
- D. The terms in Pattern B are 20 more than the corresponding terms in Pattern A.

2.

M02449

Which expression shows a possible first step in the process for finding the sum of $\frac{3}{8}$ and $\frac{5}{3}$?

- A. $\frac{3+5}{8+3}$
- B. $\frac{9+40}{24+24}$
- C. $\frac{6+13}{11}$
- D. $\frac{9+40}{24}$

3.

VF643115

Ben's aunt gives him \$100 to spend on clothes. He buys 3 shirts that cost \$16 each and 1 pair of pants that costs \$29.



Part A

What is the total amount that Ben spends on shirts?

Enter your answer in the box.

Part B

How much more money does Ben spend on the 3 shirts than on the pair of pants?

Enter your answer in the box.

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3. (continued from previous page)

VF643115

Part C

Ben also buys a baseball cap that is \$4 off the normal cost of \$20. Write an expression that shows how much Ben spends on all of his purchases.

Explain how you determined your expression.

Write an equation that can be used to determine the amount of money Ben should have remaining after all his purchases. Be sure to include a variable in your equation. Solve your equation to find the amount of money Ben has remaining.

Enter your expression, your explanation, your equation, and your solution in the space provided.



▼ Math symbols

+	-	×	÷
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4.

VH002073

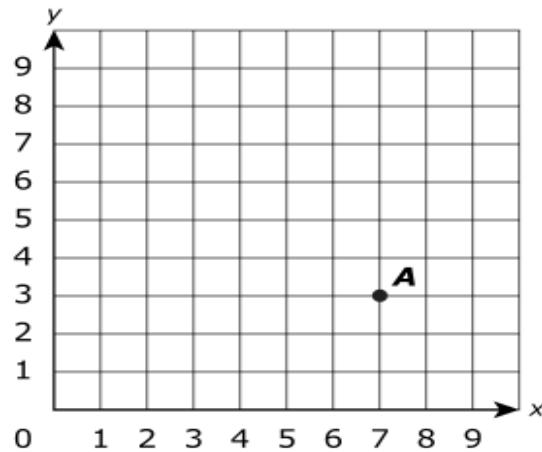
Select the **two** correct equations.

- A. $35.9 \times \frac{1}{10} = 3.59$
- B. $35.9 \times 10 = 3.59$
- C. $35.9 \times 100 = 359$
- D. $35.9 \times \frac{1}{10} = 359$
- E. $35.9 \times 1 = 0.359$
- F. $35.9 \times \frac{1}{100} = 0.359$

5.

M00996P

What is the location of point A shown on the coordinate plane?



- A. (3, 7)
- B. (4, 8)
- C. (7, 3)
- D. (8, 4)

6.

M01509

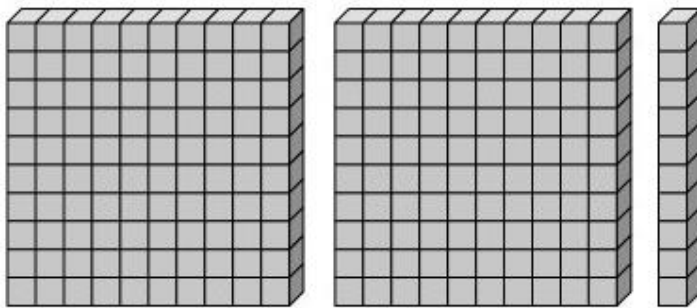
A box has a volume of 96 cubic units. Which statement is true about the box?

- A. The box can be completely filled using 1 cube that measures 1 unit on each side.
- B. The box can be completely filled using 96 cubes that measure 1 unit on each side.
- C. The box can be completely filled using 1 cube that measures 96 units on each side.
- D. The box can be completely filled using 96 cubes that measure 96 units on each side.

7.

4106-M03478

The value 2.1 is shown by the base-ten model.



Part A

Explain how the value 2.1 is shown by the base-ten model.

Enter your explanation in the space provided.



▼ Math symbols

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7. (continued from previous page)

4106-M03478

Part B

The model can be used to help solve the equation shown.

$$2.1 \div 0.35 = \square$$

- Explain how the model can be used to help solve the equation.
- Include the solution to the equation in your explanation. Show your work.

Enter your explanation, your answer, and your work in the space provided.



▼ Math symbols

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$\frac{\square}{\square}$	$\frac{\square}{\square}$	(·)	[·]
=	<	>	≠
\$	°	?	

8.

M00517P

Which statements are true for any positive whole number?

Select the **three** correct answers.

- A. When multiplied by $1\frac{1}{2}$, the product is less than the number.
- B. When multiplied by $\frac{6}{6}$, the product is less than the number.
- C. When multiplied by $\frac{4}{5}$, the product is less than the number.
- D. When multiplied by $\frac{1}{2}$, the product is greater than the number.
- E. When multiplied by $\frac{5}{4}$, the product is greater than the number.
- F. When multiplied by $1\frac{2}{3}$, the product is greater than the number.

9.

M01824

An art teacher paints part of a wall in her classroom. She paints the top $\frac{2}{5}$ of the wall blue and the bottom $\frac{1}{6}$ of the wall green. She does not paint the rest of the wall. What fraction of the wall does the teacher paint?

- A. $\frac{3}{11}$
- B. $\frac{9}{15}$
- C. $\frac{11}{30}$
- D. $\frac{17}{30}$

10.

M03555

Haley babysits after school 5 days a week Monday through Friday. She earns \$9 for each hour she babysits. Haley babysits for 2 hours each day on Monday, Tuesday, and Wednesday. She babysits for $2\frac{1}{2}$ hours each day on Thursday and Friday. Haley saves $\frac{2}{3}$ of the money she earns each week.

- How much money will Haley save from babysitting in one week?
- Show your work.
- Include the equation or equations used to solve the problem.

Enter your answer, your equation or equations, and your work or explanation in the space provided.



▼ Math symbols

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$\frac{\square}{\square}$	$\square \square$	(.)	[.]
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11.

M02110

Jeremy has $\frac{5}{6}$ of a pound of rice. Shaila has $\frac{7}{10}$ of a pound of rice. Which statement **best** describes the total amount of rice that Jeremy and Shaila have?

- A. Together they have less than 1 pound of rice, because each person has less than $\frac{1}{2}$ of a pound of rice.
- B. Together they have less than 1 pound of rice, because each person has less than 1 pound of rice.
- C. Together they have more than 1 pound of rice, because each person has less than 1 pound of rice.
- D. Together they have more than 1 pound of rice, because each person has more than $\frac{1}{2}$ of a pound of rice.

12.

M00218

What is the value of 679×74 ?

Enter your answer in the box.

13.

M01531

What is the product of $\frac{7}{8}$ and $\frac{9}{12}$?

- A. $\frac{4}{5}$
- B. $\frac{1}{6}$
- C. $\frac{9}{14}$
- D. $\frac{21}{32}$

14.

0129-M00697P

Part A

Which number shows eight and one hundred thirty-eight thousandths in expanded form?

- A. $8 \times 1 + 1 \times \frac{1}{10} + 3 \times \frac{1}{100} + 8 \times \frac{1}{1,000}$
- B. $8 \times 1 + 1 \times \frac{1}{1,000} + 3 \times \frac{1}{100} + 8 \times \frac{1}{10}$
- C. $8 \times 10 + 1 \times 1 + 3 \times \frac{1}{10} + 8 \times \frac{1}{100}$
- D. $8 \times 1,000 + 1 \times 100 + 3 \times 10 + 8 \times 1$

Part B

What is eight and one hundred thirty-eight thousandths rounded to the nearest tenth?




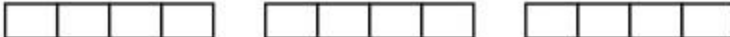
Enter your answer in the box.

15.

VF886110

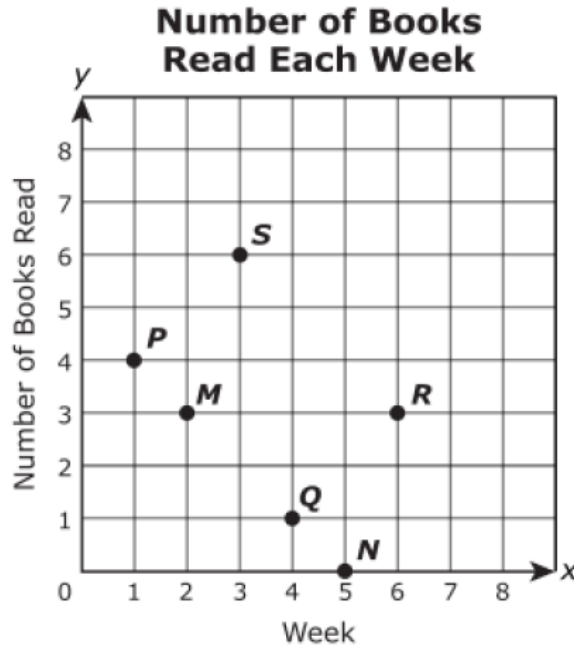
Dan has 3 cups of cupcake batter. Each cupcake is made with $\frac{1}{4}$ cup of batter.

Which model should Dan use to find the total number of cupcakes he can make with 3 cups of batter?

- A. 
- B. 
- C. 
- D. 

Part A

A student graphed the number of books read over several weeks as shown on the coordinate plane.



In the first week, the student read a total of 4 books. In the third week, the student read a total of 6 books.

Which two points on the coordinate plane show this information?

Select the **two** correct answers.

- A. Point *M*
- B. Point *N*
- C. Point *P*
- D. Point *Q*
- E. Point *R*
- F. Point *S*

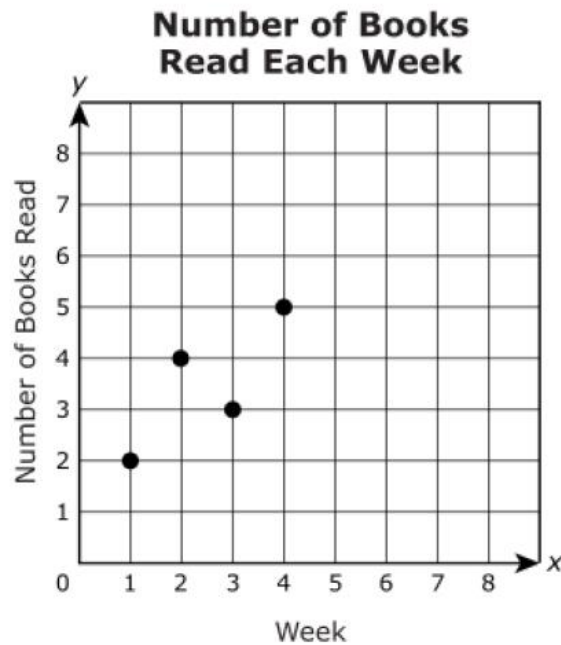
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4130-M03607P

Part B

A different student graphed the number of books read over several weeks as shown on the coordinate plane.



Which statement about the progress of this student is true?

- A. During week 2, the student read only 1 book.
- B. The student read twice as many books in week 2 as in week 1.
- C. The student read twice as many books in week 4 as in week 2.
- D. The point that shows how many books the student read in week 2 is located at $(4, 2)$.

17.

VF524499

What is the quotient when 2,415 is divided by 23?

Enter your answer in the box.

18.

VF656117

Diana has 1 square yard of fabric. She will make one pillow that requires $\frac{3}{8}$ square yard of fabric and another pillow that requires $\frac{2}{8}$ square yard of fabric. Diana uses the equations shown to explain her process to find the number of square yards of fabric she will use and the number of square yards of fabric she will have left.

$$\frac{3}{8} + \frac{2}{8} = \frac{5}{16} \text{ square yard of fabric will be used.}$$

$$1 - \frac{5}{16} = \frac{16}{16} - \frac{5}{16} = \frac{11}{16} \text{ square yard of fabric will be left.}$$

Diana made an error in her process. Write and solve equations to explain how to correctly find the amount of fabric she will use and the amount of fabric she will have left. Be sure to include the amount of fabric Diana will use and the amount of fabric she will have left in your explanation.

Enter your equations, your answers, and your work or explanation in the space provided.



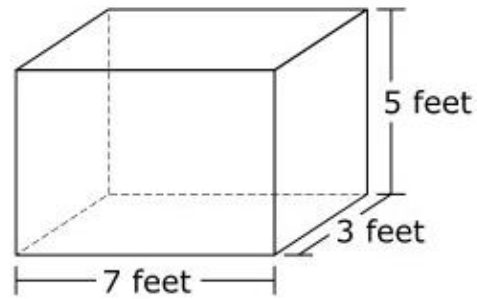
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19.

VF441143

Mrs. Peterson bought a bookshelf at a furniture store. The bookshelf was placed in a box in the shape of a right rectangular prism. A model of the box is shown.



What is the volume, in cubic feet, of the box?

- A. 35
- B. 60
- C. 105
- D. 415