

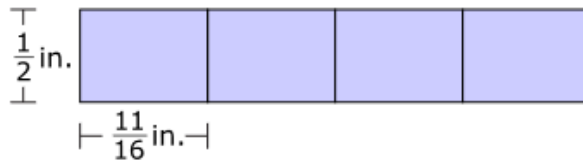
Math  
Spring Operational 2015

Grade 5  
Performance Based Assessment  
Released Items

1. Solve  $\frac{6}{6} - \frac{2}{3}$ .

- A.  $\frac{5}{6}$   
 B.  $\frac{4}{3}$   
 C.  $\frac{2}{3}$   
 D.  $\frac{1}{3}$

2. Maria decorated her notebook with 4 rectangular stickers. Each sticker was  $\frac{1}{2}$  inch wide and  $\frac{11}{16}$  inch long.

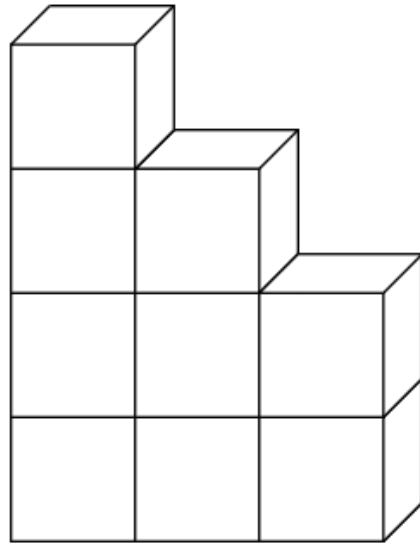


What is the total area, in square inches, of all the stickers that Maria used?

Enter your answer in the space provided. Enter **only** your answer.

	$+$	$-$	$\times$	$\div$	$\frac{\square}{\square}$	$\frac{\square}{\square}$
	$=$	$<$	$>$	$(\cdot)$	$  \cdot  $	$\$$

3.



Anika stacked cubes, each with an edge of 1 inch, to build a model. The figure above shows how Anika stacked the cubes. What is the volume, in cubic inches, of Anika's model?

- A. 3
- B. 9
- C. 16
- D. 18

4. Drag and drop an operation symbol and a number into the appropriate blanks to make a true statement.

35   = 3.5

5. Select the **two** correct comparisons.

A.  $0.057 < 0.008$

B.  $0.057 < 0.57$

C.  $0.57 = 0.570$

D.  $0.57 > 1.001$

E.  $0.057 < 0.049$

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6. What is the product of  $\frac{2}{3} \times \frac{3}{8}$ ?

A.  $\frac{5}{11}$

B.  $\frac{9}{16}$

C.  $\frac{5}{24}$

D.  $\frac{6}{24}$

**7. Part A**

On Friday,  $\frac{3}{10}$  of the students at a school were wearing white shirts and  $\frac{5}{12}$  of the students were wearing blue shirts. What fraction of students were wearing either a white shirt or a blue shirt?

- A.  $\frac{4}{5}$
- B.  $\frac{4}{11}$
- C.  $\frac{7}{60}$
- D.  $\frac{43}{60}$

**Part B**

On the same day at the school,  $\frac{1}{6}$  of the students were wearing skirts and  $\frac{5}{8}$  of the students were wearing pants. The rest of the students were wearing shorts. What fraction of the students were wearing shorts?

- A.  $\frac{3}{7}$
- B.  $\frac{4}{7}$
- C.  $\frac{5}{24}$
- D.  $\frac{19}{24}$

**8. Part A**

Which pairs of factors have a product between 2,000 and 3,000?

Select the **three** pairs that apply.

- A.  $8 \times 200$
- B.  $9 \times 300$
- C.  $70 \times 30$
- D.  $90 \times 20$
- E.  $700 \times 3$
- F.  $800 \times 4$

**Part B**

Which two pairs of factors have a product of about 2,700?

Select the **two** pairs of factors that apply.

- A.  $9 \times 313$
- B.  $9 \times 382$
- C.  $84 \times 21$
- D.  $86 \times 39$
- E.  $912 \times 3$

9. **Part A**

The students in Ms. Blanco's class worked a total of 45 hours at a garden. There are 20 students in Ms. Blanco's class, and each student worked the same number of hours. How many hours did each student work at the garden?

- A.  $2\frac{1}{9}$
- B.  $2\frac{1}{4}$
- C.  $2\frac{1}{3}$
- D.  $2\frac{3}{4}$

**Part B**

During another week, 15 students in Ms. Blanco's class worked a total of 48 hours in the same garden. Each of the 15 students worked the same number of hours. Between what two whole numbers is the number of hours worked by each student in the garden?

- A. 2 and 3
- B. 3 and 4
- C. 4 and 5
- D. 5 and 6

10. **Part A**

Jake built a figure out of centimeter cubes.

**Jake's Figure**

What is the volume of Jake's figure?

Enter your answer in the box.

cubic centimeters

**Part B**

Tom also made a figure. The length of his figure is 9 centimeters, the width is 2 centimeters, and the height is 1 centimeter.

What is the volume of Tom's figure?

Enter your answer in the box.

cubic centimeters

**Part C**

What is the total volume for both Tom and Jake's figures?

Show your work and explain how you found the total volume.



▼ Math symbols

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11. Leah incorrectly added the fractions  $\frac{2}{3}$ ,  $\frac{1}{2}$ , and  $\frac{5}{12}$ . She said that to add fractions with different denominators, you use the common denominator and add the numerators. Leah's work is shown.

$$\frac{2}{3} + \frac{1}{2} + \frac{5}{12}$$

$$\frac{2 + 1 + 5}{12}$$

$$\frac{8}{12}$$

- What is Leah's mistake?
- Find the correct value of  $\frac{2}{3} + \frac{1}{2} + \frac{5}{12}$ .
- Show your work or explain your answer.

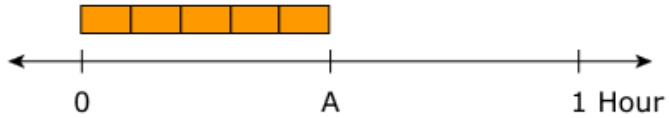
Enter your answers and your work or explanation in the space provided.



▼ Math symbols

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12. Cora has  $\frac{1}{2}$  hour to do 5 chores. She plans to spend the same fraction of an hour on each chore. She wants to use the number line to help her determine what fraction of an hour she can spend on each chore.



- What is the correct number label for point A?
- Explain how to use this number line to help Cora solve her problem.
- What fraction of an hour will she spend on each chore?

Enter your answers and your explanation in the space provided.



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13. **Part A**

Write this number in expanded form.

670,503

Enter your answer in the space provided.



▼ Math symbols

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**Part B**

Show or explain how to write 8,523 in expanded form using 15 hundreds.

Enter your work or explanation in the space provided.



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**Part C**

A student used 80 ten thousands in the expanded form of the number 6,807,590.

Show or explain how 6 hundred thousands, 80 ten thousands, 7 thousands, 5 hundreds, and 9 tens can or cannot be used to represent 6,807,590. If it cannot be used, show how you would correct it and still use 80 ten thousands.

Enter your work or explanation in the space provided.



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14. Katie went to a craft store to purchase the supplies she needs to make two types of jewelry. This table shows the costs of the supplies Katie needed.

**Costs of Supplies**

Item	Cost per item
bead	\$0.05
charm	\$0.45

This table shows the supplies needed to make each piece of jewelry.

**Supplies Needed**

Type of Jewelry	Beads	Charms
bracelet	25	4
necklace	48	1

Katie purchased the exact amount of supplies to make 1 bracelet and 2 necklaces.

**Part A**

Write an expression to determine the cost of supplies to make 1 bracelet.

Enter your expression in the space provided.



▼ Math symbols

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**Part B**

Write an expression to determine the cost of supplies to make 2 necklaces.

Enter your expression in the space provided.



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**Part C**

Katie started with \$40. How much did she have left after purchasing the supplies?

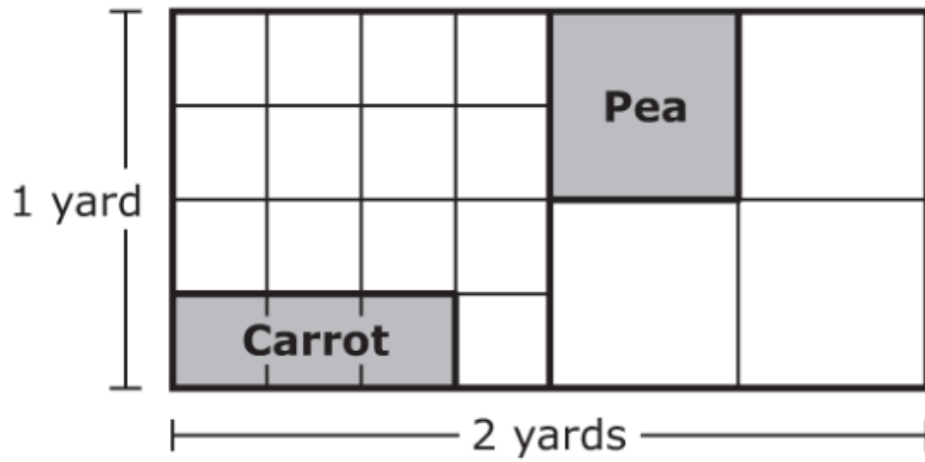
Enter your answer in the space provided. Enter **only** your answer.



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15. Joshua planted carrots and peas in his garden.



Use the model to write and solve an equation that shows how much larger the pea section of the garden is than the carrot section of the garden.

Enter your equation and your solution in the space provided.



▼ Math symbols

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16. Maria bought wood, paper, and string to make one kite. The list shows the amount and the unit cost of each item she bought.

- 12 square feet of paper at \$1 per square foot
- 4 feet of wood at \$3 per foot
- 14 yards of string at \$2 per yard

### Part A

What was the total cost of the items Maria bought? Show all the steps you took to find your answer. Be sure to label your answer.

Enter your answer and show your work in the space provided.

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▼ Math symbols

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### Part B

Maria will make 4 more kites for her friends. Determine how much paper, wood, and string are needed and the total cost to make the 4 kites. Show all the steps you took to find your answer. Be sure to label your answer.

Enter your answer and show your work in the space provided.

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