

## MCAP ... Grade 5 Practice (Section 2)



### Mathematics

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1 A shopper buys some fruit.

- The shopper buys a pack of strawberries and 2 pounds of peaches.
- A pack of strawberries weighs 1.2 pounds and costs \$6.55.
- A pound of peaches costs \$3.29.

Which statement explains the shopper's correct thinking to find the total cost of the fruit?

- A** The shopper thinks that there is 1 pack of strawberries and 1 pound of peaches, and  $6.55 + 3.29 = 9.84$ .
- B** The shopper thinks that there is 1 pack of strawberries and 2 pounds of peaches, and  $6.55 + 2 \times 3.29 = 13.13$ .
- C** The shopper thinks that there are 1.2 pounds of strawberries and 1 pound of peaches, and  $1.2 \times 6.55 + 3.29 = 11.15$ .
- D** The shopper thinks that there are 1.2 pounds of strawberries and 2 pounds of peaches, and  $1.2 \times 6.55 + 2 \times 3.29 = 14.44$ .

2 Daniel used plastic bricks to build 200 figures in 5 hours.

- He built 60 figures during the first hour and 50 figures during the second hour.
- During the first two hours, he used 3 bricks to build each figure.
- During each additional hour, Daniel used 4 bricks to build each figure.

Which **three** questions can be answered using the given information?

Select the **three** correct answers.

- A** How many figures did Daniel build using 4 bricks?
- B** How many bricks did Daniel use during the fifth hour?
- C** How many bricks did Daniel use during the second hour?
- D** During which hour did Daniel build the greatest number of figures?
- E** What is the total number of bricks Daniel used to build all the figures?

## MCAP ... Grade 5 Practice (Section 2)

- 3 A student performed the division problems shown.

$$1875 \div 15 = 125$$

$$3825 \div 15 = 255$$

The student claims that when a 4-digit number ending in 5 is divided by 15, the quotient always ends in 5 and there is no remainder.

Determine whether the student's claim is correct or incorrect. If the claim is correct, explain why it is correct. If the claim is incorrect, give two examples that prove that it is incorrect.

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

- 4 A teacher is planning a lesson that includes some activities to be completed at a computer.
- There are 18 students in the classroom.
  - The students will be split up in groups of the same size.
  - Each group will need to use the computer for  $\frac{1}{2}$  hour.

Which additional piece of information is needed to determine how long the computer will need to be in the classroom?

- A** the number of students in each group
- B** the number of activities that must be completed at the computer
- C** the number of times the computer will be available in the classroom
- D** no more information is needed to find how much time each group will have

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5 Kasey will make as many servings of trail mix as possible with these ingredients: walnuts, pretzels, and apricots.

- Each serving will have  $\frac{1}{6}$  cup of walnuts,  $\frac{1}{4}$  cup of pretzels, and  $\frac{1}{8}$  cup of apricots.
- Kasey has 10 cups of walnuts, 12 cups of pretzels, and 9 cups of apricots with which to make the trail mix.
- Determine how many servings Kasey will make.
- Determine which ingredient Kasey will completely use, **and** determine how much of the other ingredients she will have left over.
- Show your work or explain how you determined your answers.

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

6 A student found the value of the expression  $10\frac{1}{4} - 6\frac{7}{8}$ .

The student subtracted the whole numbers first and then subtracted the lesser fraction from the greater fraction to find the answer.

Which steps correct the error in the student's thinking?

- A** Step 1: subtract  $\frac{2}{8}$  from  $\frac{7}{8}$   
Step 2: subtract 6 from 10
- B** Step 1: subtract  $\frac{7}{8}$  from  $\frac{10}{8}$   
Step 2: subtract 6 from 10
- C** Step 1: regroup the whole number  
Step 2: subtract  $\frac{2}{8}$  from  $\frac{7}{8}$   
Step 3: subtract 6 from 9
- D** Step 1: regroup the whole number  
Step 2: subtract  $\frac{7}{8}$  from  $\frac{10}{8}$   
Step 3: subtract 6 from 9

**Answers**

Item Number	Answer Key
1.	B
2.	A, C, E
3.	<p><b><u>Sample Top Score Response</u></b></p> <p>First example: <math>1005 \div 15 = 67</math>. Since 67 doesn't end in 5, the claim is incorrect.</p> <p>Second example: <math>4235 \div 15 = 282\frac{1}{3}</math>.</p> <p>Since <math>282\frac{1}{3}</math> doesn't end in 5 and has a remainder, the claim is incorrect.</p> <p><b>Refer to the Holistic Rubric for 3-Point Reasoning Constructed Response Items for score point information.</b></p>
4.	A

MCAP ... Grade 5 Practice (Section 2)

Answers

Item Number	Answer Key
5.	<p><b><u>Sample Top Score Response</u></b></p> <p>10 cups of walnuts can be used to make <math>10 \div \frac{1}{6} = 60</math> servings of trail mix.</p> <p>12 cups of pretzels can be used to make <math>12 \div \frac{1}{4} = 48</math> servings of trail mix.</p> <p>9 cups of apricots can be used to make <math>9 \div \frac{1}{8} = 72</math> servings of trail mix.</p> <p>The least of these values is 48, so a total of 48 servings of trail mix can be made.</p> <p>Kasey will use all the pretzels.</p> <p>48 servings of trail mix require <math>48 \times \frac{1}{6} = 8</math> cups of walnuts, so Kasey will have <math>10 - 8 = 2</math> cups of walnuts left over.</p> <p>48 servings of trail mix require <math>48 \times \frac{1}{8} = 6</math> cups of apricots, so Kasey will have <math>9 - 6 = 3</math> cups of apricots left over.</p> <p><b>Refer to the Holistic Rubric for 4-Point Modeling Constructed Response Items for score point information.</b></p>
6.	D