MCAP … Grade 6 Practice (Section 2)

Mathematics

1 Which value from the set $\left\{\frac{3}{4}, 1, \frac{3}{2}, 3\frac{3}{4}\right\}$ is a solution to the equation $x + \frac{3}{2} = 2\frac{1}{4}$?

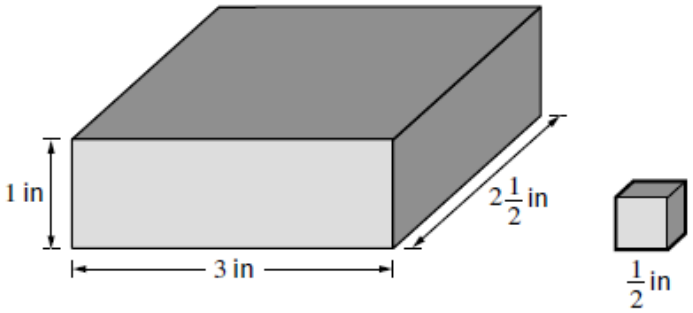
A $\frac{3}{4}$

B 1

C $\frac{3}{2}$

D $3\frac{3}{4}$

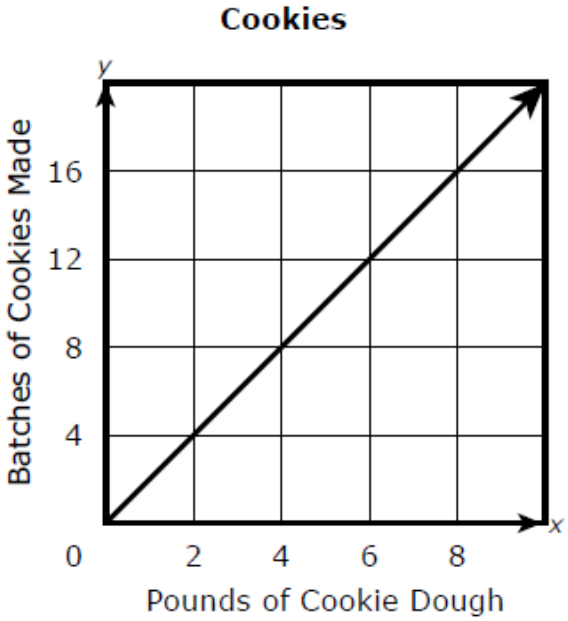
2 Kevin has a rectangular prism that was made up of identical cubes, with no gaps between any cubes. The following figure shows the prism and one of the cubes.



What was the total number of the cubes used to make up the prism?

Enter your answer in the space provided.

3 A baker made 8 pounds of cookie dough. The baker used the dough to make several batches of cookies. The graph shows the amount of cookie dough that is needed to make different numbers of batches of cookies.



Based on the graph, which statement correctly explains the number of batches of cookies the baker can make from the 8 pounds of dough?

A The baker can make 8 batches of cookies because it takes 1 pound of dough to make 1 batch of cookies.

B The baker can make 16 batches of cookies because it takes 1 pound of dough to make 1 batch of cookies.

C The baker can make 8 batches of cookies because it takes 1 pound of dough to make 2 batches of cookies.

D The baker can make 16 batches of cookies because it takes 1 pound of dough to make 2 batches of cookies.

Mathematics

4 A machine in a factory makes chairs at a rate of 2 chairs every 10 minutes.

- How much time does the machine take to make 5 chairs?
- How many minutes would it take for the factory to fulfill an order for 32 chairs?

Show your work or explain how you determined your answers.

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

5 A worker has 25 feet of ribbon to make bows. Each bow uses 2 feet of ribbon. The worker divides 25 by 2 and gets 12.5 as an answer.

What does the worker's answer mean in this context?

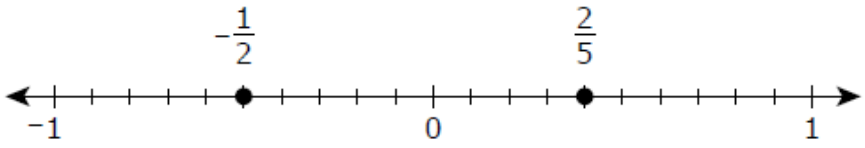
A The worker can make 12 bows and have 1 foot of ribbon left.

B The worker can make 12 bows and have 5 feet of ribbon left.

C The worker can make 5 bows and have 12 feet of ribbon left.

D The worker can make 1 bow and have 12 feet of ribbon left.

6 The numbers $-\frac{1}{2}$ and $\frac{2}{5}$ are graphed on the number line.



Which statement correctly compares the absolute values of $-\frac{1}{2}$ and $\frac{2}{5}$ and gives the correct reasoning for the comparison?

A $-\frac{1}{2}$ has the lesser absolute value because $-\frac{1}{2}$ is closer to zero than $\frac{2}{5}$ is to zero.

B $-\frac{1}{2}$ has the greater absolute value because $-\frac{1}{2}$ is closer to zero than $\frac{2}{5}$ is to zero.

C $-\frac{1}{2}$ has the lesser absolute value because $-\frac{1}{2}$ is further from zero than $\frac{2}{5}$ is from zero.

D $-\frac{1}{2}$ has the greater absolute value because $-\frac{1}{2}$ is further from zero than $\frac{2}{5}$ is from zero.

7 At a store, 40% of all the refrigerators are silver. There are 50 silver refrigerators at the store.

How many refrigerators are at the store?

Enter your answer in the space provided.

Answers

Section 2

Item Number	Answer Key
1.	A
2.	60
3.	D
4.	**Sample Top Score Response** A rate of 2 chairs every 10 minutes is equivalent to 1 chair every 5 minutes. To make 5 chairs, a time of $5 \times 5 = 25$ minutes is required. Since 2 chairs are made every 10 minutes, the value $32 \div 2 = 16$ should be multiplied by 10. $16 \times 10 = 160$, so 160 minutes are required to make 32 chairs. **Refer to the Holistic Rubric for 4-Point Reasoning Constructed Response Items for score point information.**
5.	A
6.	D
7.	125