

2021 MCAS Sample Student Work and Scoring Guide

Grade 4 Mathematics

Question 14: Constructed-Response

Reporting Category: Measurement and Data

Standard: [4.MD.A.2](#) - Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

Item Description: Solve real-world problems involving reading an analog clock and adding and subtracting time intervals.

Calculator: Not allowed

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Scoring Guide

Select a score point in the table below to view the sample student response.

Score*	Description
4A	The student response demonstrates an exemplary understanding of the Measurement and Data concepts involved in using the four operations to solve word problems involving intervals of time. The student identifies time given on an analog clock and computes elapsed time for past and future events.
4B	
3	The student response demonstrates a good understanding of the Measurement and Data concepts involved in using the four operations to solve word problems involving intervals of time. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result, the response merits 3 points.
2	The student response demonstrates a fair understanding of the Measurement and Data concepts involved in using the four operations to solve word problems involving intervals of time. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Measurement and Data concepts involved in using the four operations to solve word problems involving intervals of time.
0	The student response contains insufficient evidence of an understanding of the Measurement and Data concepts involved in using the four operations to solve word problems involving intervals of time. As a result, the response does not merit any points.

*Letters are used to distinguish between sample student responses that earned the same score (e.g., 4A and 4B).

Score Point 4A

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

Cary woke up at 7:05 A.M

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

Cary went to school at 8:20 A.M and i got that answer from adding 1 hour and 15 minutes to 7:05.

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

Cary had lunch at 11:40 and i got that answer from subtracting 4 hours from 3:40.

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the latest time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

He can start his homework at 4:45 and end at 5:30, i got ths answer from subtracting 45 minutes from 5:30.

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Score Point 4B

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

7:05 a.m.

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

$$7:05 + 1:15 = 8:20$$

He left for school at 8:20 a.m.

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

$$4:00 - 4 \text{ hours} = 12:00$$

$$12:00 - 20 \text{ minutes} = 11:40$$

He ate lunch at 11:40 a.m.

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the **latest** time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

$$5:30 - 45 = 4:45$$

The latest time he can start his homework is at 4:45 p.m.

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Score Point 3

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

Cary woke up at 7:05 a.m.

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

Cary left for school at 8:20 . I got my answer by adding 1 hour and 15 minutes to 7:05 and that got me to the answer 8:20.

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

I got my answer 11:40 because I subtracted 4 hours from 3:40 and thats how i got my answer.

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the latest time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

The latest time Cary can get done is at 4:25 because if u add 45 mins to 3:40 you will get 4:25.

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Score Point 2

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

7: 05 a.m.

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

8 : 20 a.m. I got my answer by : first I know that 7 + 1 is 8 so I did that math then added 15 + 5 in my head witch is 20 easy.

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

12:00 just go back from 3:40

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the **latest** time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

4 : 50 becasuse Cary can still watch his fav TV show when he still dose his homework.

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Score Point 1

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

7.05 a.m

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

$7.05 - 1.15 = 6.30$

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

$3.40 + 4 = 7.40$ p.m

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the latest time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

$$5:30 - 45 = 4.85$$

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Score Point 0

This question has four parts.

This clock shows the time that Cary woke up this morning.

**Part A**

At what time did Cary wake up? Be sure to label your answer with a.m. or p.m.

Enter your answer in the space provided.

1: 35 pm or am

Part B

Cary left for school 1 hour and 15 minutes after he woke up. At what time did Cary leave for school? Show or explain how you got your answer.

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

1: 15

Part C

Cary left school at 3:40. He ate lunch 4 hours before he left school. At what time did Cary eat lunch? Show or explain how you got your answer.

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

3:40 + 4 hours 7:40

Part D

Cary has 45 minutes of homework. His favorite TV show is at 5:30. What is the **latest** time Cary can start his homework to be finished at 5:30? Show or explain how you got your answer.

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

$$5:30 + 45 = 6:15$$

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