

2023 MCAS Sample Student Work and Scoring Guide

Grade 3 Mathematics

Question 18: Constructed-Response

Reporting Category: Measurement and Data

Standard: [3.MD.A.1](#) - Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Item Description: Tell time on an analog clock, determine an interval of time given time on a digital clock, and solve a word problem by adding a time interval in minutes larger than one hour that changes from A.M. to P.M.

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
3A	The student response demonstrates an exemplary understanding of the Measurement and Data concepts involved in telling and writing time to the nearest minute, measuring time intervals in minutes, and solving word problems involving addition and subtraction of time intervals in minutes. The student tells the time on an analog clock, measures a time interval in minutes given time on a digital clock, and solves a word problem involving addition of time intervals in minutes larger than one hour.
3B	
2	The student response demonstrates a good understanding of the Measurement and Data concepts involved in telling and writing time to the nearest minute, measuring time intervals in minutes, and solving word problems involving addition and subtraction of time intervals in minutes. 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 2 points.
1	The student response demonstrates a minimal understanding of the Measurement and Data concepts involved in telling and writing time to the nearest minute, measuring time intervals in minutes, and solving word problems involving addition and subtraction of time intervals in minutes. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 1 point.
0	The student response contains insufficient evidence of an understanding of the Measurement and Data concepts involved in telling and writing time to the nearest minute, measuring time intervals in minutes, and solving word problems involving addition and subtraction of time intervals in minutes. 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., 3A and 3B).

Score Point 3A

This question has three parts.

On Saturday morning, it started snowing at the time shown on this clock.



Part A

At what time did it start snowing on Saturday morning? Be sure to use a.m. or p.m. in your answer.

Enter your answer in the space provided.

It started snowing at 10:22 a.m. on Saturday morning.

Part B

It stopped snowing on Saturday at the time shown on this clock.



What was the total number of minutes that it snowed on Saturday? Show or explain how you got your answer.

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

It snowed for 29 minutes on Saturday morning because $22 + 29 = 51$.

Part C

On Sunday, it started snowing at 11:35 a.m. It snowed for 83 minutes.

At what time did it stop snowing on Sunday? Be sure to use a.m. or p.m. in your answer. Show or explain how you got your answer.

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

It stopped snowing at 12:58 p.m. because 83 minutes is the same as 1 hour and 23 minutes and $11:35 + 1$ hour and 23 minutes = 12:58.

Score Point 3B

This question has three parts.

On Saturday morning, it started snowing at the time shown on this clock.



Part A

At what time did it start snowing on Saturday morning? Be sure to use a.m. or p.m. in your answer.

Enter your answer in the space provided.

10:22a.m.

Part B

It stopped snowing on Saturday at the time shown on this clock.



What was the total number of minutes that it snowed on Saturday? Show or explain how you got your answer.

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

29 minutes is the answer.

$$22 + 8 = 30$$

$$30 + 20 = 50$$

$$50 + 1 = 51$$

$$8 + 20 + 1 = 29!$$

Part C

On Sunday, it started snowing at 11:35 a.m. It snowed for 83 minutes.

At what time did it stop snowing on Sunday? Be sure to use a.m. or p.m. in your answer. Show or explain how you got your answer.

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

On Sunday, it stopped snowing at 12:58 p.m.

$$11:35 + 5 = 11:40$$

There was 78 minutes left after that.

$$11:40 + 20 = 12:00$$

There were 58 minutes after that.

$$12:00 + 58 = 12:58!$$

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Score Point 2

This question has three parts.

On Saturday morning, it started snowing at the time shown on this clock.



Part A

At what time did it start snowing on Saturday morning? Be sure to use a.m. or p.m. in your answer.

Enter your answer in the space provided.

10:22 A.M.

Part B

It stopped snowing on Saturday at the time shown on this clock.



What was the total number of minutes that it snowed on Saturday? Show or explain how you got your answer.

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

$51 - 22 = 29$ min

Part C

On Sunday, it started snowing at 11:35 a.m. It snowed for 83 minutes.

At what time did it stop snowing on Sunday? Be sure to use a.m. or p.m. in your answer. Show or explain how you got your answer.

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

11:50 A.M.

Score Point 1

This question has three parts.

On Saturday morning, it started snowing at the time shown on this clock.



Part A

At what time did it start snowing on Saturday morning? Be sure to use a.m. or p.m. in your answer.

Enter your answer in the space provided.

Part B

It stopped snowing on Saturday at the time shown on this clock.



What was the total number of minutes that it snowed on Saturday? Show or explain how you got your answer.

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

Part C

On Sunday, it started snowing at 11:35 a.m. It snowed for 83 minutes.

At what time did it stop snowing on Sunday? Be sure to use a.m. or p.m. in your answer. Show or explain how you got your answer.

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

Score Point 0

This question has three parts.

On Saturday morning, it started snowing at the time shown on this clock.



Part A

At what time did it start snowing on Saturday morning? Be sure to use a.m. or p.m. in your answer.

Enter your answer in the space provided.

The snow stoped at 10;52 p,m

Part B

It stopped snowing on Saturday at the time shown on this clock.



What was the total number of minutes that it snowed on Saturday? Show or explain how you got your answer.

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

I know this because. First i added $10 + 5$ and compared the time. Next i added $10 + 5$. Then i got 6;00p,m

Part C

On Sunday, it started snowing at 11:35 a.m. It snowed for 83 minutes.

At what time did it stop snowing on Sunday? Be sure to use a.m. or p.m. in your answer. Show or explain how you got your answer.

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

$11 - 5 = 3$. I know this because. First i subtrated $11 - 5$. Next i subtracted and compared. Then i got 3.