

2021 MCAS Sample Student Work and Scoring Guide

Grade 3 Mathematics

Question 7: 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: Solve word problems by finding time intervals using subtraction and addition.

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 solving word problems that require addition and subtraction of time intervals in minutes. The student correctly uses addition and subtraction of time intervals to solve word problems.
3B	
2	The student response demonstrates a good understanding of the Measurement and Data concepts involved in solving word problems that require 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 solving word problems that require 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 solving word problems that require 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 two parts.**

A child spent time doing three activities after school.

- He spent 30 minutes doing homework.
- He spent 45 minutes doing chores.
- He spent 1 hour and 15 minutes playing outside.

Part A

How many **more** minutes did the child spend doing chores than doing homework? Show or explain how you got your answer.

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

$$45 - 30 = 15$$

He spent 15 more minutes on chores

Part B

What is the total number of minutes the child spent doing all three activities? Show or explain how you got your answer.

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

$$30 + 45$$

$$30 + 45 + 60 + 15 = 150$$

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Score Point 3B**This question has two parts.**

A child spent time doing three activities after school.

- He spent 30 minutes doing homework.
- He spent 45 minutes doing chores.
- He spent 1 hour and 15 minutes playing outside.

Part A

How many **more** minutes did the child spend doing chores than doing homework? Show or explain how you got your answer.

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

The child spent 15 more minutes doing chores than doing homework I found this out because I subtracted $45 - 30$ and got 15 the child spent 15 more minutes than doing homework.

Part B

What is the total number of minutes the child spent doing all three activities? Show or explain how you got your answer.

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

The child spent 150 minutes doing all three activities because $45 + \square 30 + 75 = 150$ I got 75 from 1 hour 15 minutes because an hour is 60 minutes plus 15 so the child spent 150 minutes doing all three activities.

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Score Point 2**This question has two parts.**

A child spent time doing three activities after school.

- He spent 30 minutes doing homework.
- He spent 45 minutes doing chores.
- He spent 1 hour and 15 minutes playing outside.

Part A

How many **more** minutes did the child spend doing chores than doing homework? Show or explain how you got your answer.

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

the spent 15 more minutes on chores than homework.

Part B

What is the total number of minutes the child spent doing all three activities? Show or explain how you got your answer.

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

the child spent 2 hours and 30 minutes on the three activites.

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Score Point 1**This question has two parts.**

A child spent time doing three activities after school.

- He spent 30 minutes doing homework.
- He spent 45 minutes doing chores.
- He spent 1 hour and 15 minutes playing outside.

Part A

How many **more** minutes did the child spend doing chores than doing homework? Show or explain how you got your answer.

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

$$45 - 30 = 15$$

15 more minutes

Part B

What is the total number of minutes the child spent doing all three activities? Show or explain how you got your answer.

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

$$15 + 30 = 45$$

$$45 \times 2 = 90$$

he spent 90 minutes

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Score Point 0**This question has two parts.**

A child spent time doing three activities after school.

- He spent 30 minutes doing homework.
- He spent 45 minutes doing chores.
- He spent 1 hour and 15 minutes playing outside.

Part A

How many **more** minutes did the child spend doing chores than doing homework? Show or explain how you got your answer.

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

what i did was $115 - 45 = 80$ minutes doing his chores.

Part B

What is the total number of minutes the child spent doing all three activities? Show or explain how you got your answer.

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

i did $115 + 45 + 30 = 190$ mins of the childs activities.

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