

2026 MCAS Sample Student Work and Scoring Guide

Grade 4 Mathematics

Question 5: Constructed-Response

Reporting Category: Operations and Algebraic Thinking

Standard: [4.OA.A.2](#) - Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

Item Description: Solve word problems by identifying and solving equations and interpreting multiplicative comparisons.

Calculator: Not allowed

This item can be found in the released item sets on the [MCAS Resource Center](#).

Scoring Guide

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

Score*	Description
4A 4B	The student response demonstrates an exemplary understanding of the Operations and Algebraic Thinking concepts involved in multiplying or dividing to solve word problems involving multiplicative comparison. The student correctly solves problems by identifying and solving equations and interpreting multiplicative comparisons.
3	The student response demonstrates a good understanding of the Operations and Algebraic Thinking concepts involved in multiplying or dividing to solve word problems involving multiplicative comparison. 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 Operations and Algebraic Thinking concepts involved in multiplying or dividing to solve word problems involving multiplicative comparison. 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 Operations and Algebraic Thinking concepts involved in multiplying or dividing to solve word problems involving multiplicative comparison.
0	The student response contains insufficient evidence of an understanding of the Operations and Algebraic Thinking concepts involved in multiplying or dividing to solve word problems involving multiplicative comparison. 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.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

- ☐ A. $7 \times g = 3$
- ☐ B. $7 + g = 3$
- ☒ C. $7 \times 3 = g$
- ☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

21 games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored? Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

9 because $4 \times 9 = 36$

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

55 because $5 \times 11 = 55$

Score Point 4B

This question has four parts.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

☐ A. $7 \times g = 3$

☐ B. $7 + g = 3$

☒ C. $7 \times 3 = g$

☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

21 games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored? Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

The number of points the Wildcats scored was 9 times the number of points the Lions scored.

I got my answer by skip counting by 4's until I reached 36, then I counted the numbers.

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

The number of points the Astros scored when they played the Lions was 55.

I got my answer by multiplying 11 by 5.

Score Point 3

This question has four parts.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

- ☐ A. $7 \times g = 3$
- ☐ B. $7 + g = 3$
- ☒ C. $7 \times 3 = g$
- ☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored? Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

It was nine times more I know because nine times four is 36.

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

The Astros scored 16 times more.

Score Point 2

This question has four parts.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

☒ A. $7 \times g = 3$

☐ B. $7 + g = 3$

☐ C. $7 \times 3 = g$

☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored? Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

$4 \times 9 = 36$

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

$11 \times 5 = 55$

Score Point 1

This question has four parts.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

☐ A. $7 \times g = 3$

☒ B. $7 + g = 3$

☐ C. $7 \times 3 = g$

☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored?

Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

together they scored 40 pontes

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

$11 \times 5 = 55$

Score Point 0

This question has four parts.

The Astros, Barons, Lions, and Wildcats are basketball teams that play each other.

Part A

Last year, the Barons won 3 games. The Astros won 7 times as many games as the Barons won.

Which of these equations can be used to find g , the number of games the Astros won last year?

☒ A. $7 \times g = 3$

☐ B. $7 + g = 3$

☐ C. $7 \times 3 = g$

☐ D. $7 + 3 = g$

Part B

How many games did the Astros win last year?

Enter your answer in the box.

10 games

Part C

When the Lions played the Wildcats,

- the Lions scored 4 points, and
- the Wildcats scored 36 points.

The number of points the Wildcats scored was how many times the number of points the Lions scored? Show or explain how you got your answer.

Enter your answer and your explanation in the space provided.

$$36 \div 4 = 9$$

36

+4

40 points

Part D

The Lions scored 11 points when they played the Astros. The Astros scored 5 times as many points as the Lions scored.

What was the number of points the **Astros** scored when they played the Lions? Show or explain how you got your answer.

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

$$11 \times 5 = 55$$

11

+5

16 points