2021 MCAS Sample Student Work and Scoring Guide

Grade 3 Mathematics
Question 10: Constructed-Response

Reporting Category: Number and Operations in Base Ten
Standard: 3.NBT.A.1 - Use place value understanding to round whole numbers to the nearest 10 or 100.
Item Description: Solve a word problem with estimation by rounding whole numbers to the nearest 10 and 100.
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 Number & Operations in Base Ten concepts involved in using place value understanding to round whole numbers to the nearest 10 or 100. The student correctly rounds whole numbers to the nearest 10 and 100 to solve word problems by estimating and determines what numbers will round to a given amount.
3B	
2	The student response demonstrates a good understanding of the Number & Operations in Base Ten concepts involved in using place value understanding to round whole numbers to the nearest 10 or 100. 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 Number & Operations in Base Ten concepts involved in using place value understanding to round whole numbers to the nearest 10 or 100. The mixed evidence provided by the student merits 1 point.
0	The student response contains insufficient evidence of an understanding of the Number & Operations in Base Ten concepts involved in using place value understanding to round whole numbers to the nearest 10 or 100. 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.

A store owner recorded the amount of money, in dollars, he earned on each of three days, as shown in this table.

Money Earned Each Day

Day	Monday	Tuesday	Wednesday
Amount (dollars)	153	116	88

Part A

The store owner rounded the amount of money, in dollars, he earned on each day to the nearest hundred.

What is each amount in the table rounded to the nearest **hundred**?

Enter your answers in the space provided.

153 rounded to the nearest hundred is 200.

116 rounded to the nearest hundred is 100.

88 rounded to the nearest hundred is 100.

$200 + 100 + 100 = 400$

Part B

The store owner estimated the total amount of money, in dollars, he earned over the three days. He did this by first rounding the amount he earned each day to the nearest **ten** and then finding the total.

What was the owner's estimate of the **total** amount of money, in dollars, he earned over the three days? Show or explain how you got your estimate.

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

153 rounded to the nearest ten is 150.

116 rounded to the nearest ten is 120.

88 rounded to the nearest ten is 90.

$150 + 120 + 90 = 360$

Part C

On Thursday, the store owner rounded the amount of money, in dollars, he earned that day to the nearest **ten** and got 60.

What is the **greatest** amount of money, in dollars, the owner could have earned on Thursday? Explain how you got your answer.

Enter your answer and your explanation in the space provided.

64 because 65 or higher rounded to the nearest ten is 70.

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Score Point 3B

This question has three parts.

A store owner recorded the amount of money, in dollars, he earned on each of three days, as shown in this table.

Money Earned Each Day

Day	Monday	Tuesday	Wednesday
Amount (dollars)	153	116	88

Part A

The store owner rounded the amount of money, in dollars, he earned on each day to the nearest hundred.

What is each amount in the table rounded to the nearest **hundred**?

Enter your answers in the space provided.

Monday $200.

Tuesday $100.

Wednesday $100.

Part B

The store owner estimated the total amount of money, in dollars, he earned over the three days. He did this by first rounding the amount he earned each day to the nearest **ten** and then finding the total.

What was the owner's estimate of the **total** amount of money, in dollars, he earned over the three days? Show or explain how you got your estimate.

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

$360.

$150 + 90 + 120 = \$360$

Part C

On Thursday, the store owner rounded the amount of money, in dollars, he earned that day to the nearest **ten** and got 60.

What is the **greatest** amount of money, in dollars, the owner could have earned on Thursday? Explain how you got your answer.

Enter your answer and your explanation in the space provided.

$64, because the numbers that round to 60 are from 55 to 64 and 64 is the largest of them.

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Score Point 2

This question has three parts.

A store owner recorded the amount of money, in dollars, he earned on each of three days, as shown in this table.

Money Earned Each Day

Day	Monday	Tuesday	Wednesday
Amount (dollars)	153	116	88

Part A

The store owner rounded the amount of money, in dollars, he earned on each day to the nearest hundred.

What is each amount in the table rounded to the nearest **hundred**?

Enter your answers in the space provided.

$153 is $200

$116 is $100

$88 is $100

Part B

The store owner estimated the total amount of money, in dollars, he earned over the three days. He did this by first rounding the amount he earned each day to the nearest **ten** and then finding the total.

What was the owner's estimate of the **total** amount of money, in dollars, he earned over the three days? Show or explain how you got your estimate.

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

$360 because if you round 153 to the nearest ten it is 150 116 is 120 and 88 is 90.Then you add $150 + 120$ and get 270 then you add $270 + 90$ and get 360.

Part C

On Thursday, the store owner rounded the amount of money, in dollars, he earned that day to the nearest **ten** and got 60.

What is the **greatest** amount of money, in dollars, the owner could have earned on Thursday? Explain how you got your answer.

Enter your answer and your explanation in the space provided.

59 because the number after 60 is 59.

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Score Point 1

This question has three parts.

A store owner recorded the amount of money, in dollars, he earned on each of three days, as shown in this table.

Money Earned Each Day

Day	Monday	Tuesday	Wednesday
Amount (dollars)	153	116	88

Part A

The store owner rounded the amount of money, in dollars, he earned on each day to the nearest hundred.

What is each amount in the table rounded to the nearest **hundred**?

Enter your answers in the space provided.

Monday 200 Tuesday 100 Wedesday 100

Part B

The store owner estimated the total amount of money, in dollars, he earned over the three days. He did this by first rounding the amount he earned each day to the nearest **ten** and then finding the total.

What was the owner's estimate of the **total** amount of money, in dollars, he earned over the three days? Show or explain how you got your estimate.

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

$269 - 88 = 181$

Part C

On Thursday, the store owner rounded the amount of money, in dollars, he earned that day to the nearest **ten** and got 60.

What is the **greatest** amount of money, in dollars, the owner could have earned on Thursday? Explain how you got your answer.

Enter your answer and your explanation in the space provided.

$59

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Score Point 0

This question has three parts.

A store owner recorded the amount of money, in dollars, he earned on each of three days, as shown in this table.

Money Earned Each Day

Day	Monday	Tuesday	Wednesday
Amount (dollars)	153	116	88

Part A

The store owner rounded the amount of money, in dollars, he earned on each day to the nearest hundred.

What is each amount in the table rounded to the nearest **hundred**?

Enter your answers in the space provided.

$153 + 116 + 88 = 357$

Part B

The store owner estimated the total amount of money, in dollars, he earned over the three days. He did this by first rounding the amount he earned each day to the nearest **ten** and then finding the total.

What was the owner's estimate of the **total** amount of money, in dollars, he earned over the three days? Show or explain how you got your estimate.

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

I took 357 and rounded it the closest ten my answer was 400

Part C

On Thursday, the store owner rounded the amount of money, in dollars, he earned that day to the nearest **ten** and got 60.

What is the **greatest** amount of money, in dollars, the owner could have earned on Thursday? Explain how you got your answer.

Enter your answer and your explanation in the space provided.

A costermer could have came on monday and gave him 20 same on teusday and wenesday.On thursday he had 60 dollars.

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