<u>**Middle School Webinar Talking Points**</u>

Slide 1 – Webinar Title

Welcome to our presentation on the Scoring of Middle School MCAS Constructed Response questions. My name is Haley Freeman, and I am part of the MCAS Mathematics Test Development Team at DESE.

Slide 2 – Agenda

During this presentation, I will review the test development and the scoring process. I will provide an overview of how questions are created, reviewed, field tested, and scored.

Then, I will review two middle school MCAS constructed response questions that were previously released. I will also review samples of student responses at each score level, and then I will allow you to independently score some student responses. At the end, I will share some online MCAS resources that are available to you, your students, and their families.

Slide 3 – Life Cycle

Before I review the constructed response questions, it is important for you to have an understanding of how questions, which we sometimes refer to as items, end up on an operational MCAS test. An operational question is a question that counts towards the student's score and has already been through a process that we call the Life Cycle of a MCAS Mathematics Question.

As you can see, there are many steps to getting a question onto an operational MCAS test. An important part of this process is the fact that teams of current educators, and content experts from various districts are included at multiple points in the process to share their suggestions on ways to refine the questions. This is something that our state is very proud of, as not all states have educators involved throughout their test construction process.

We have two educator committees - the Assessment Development Committee or ADC (in the grey boxes) and the Bias and Sensitivity Committee or BSC (in the blue boxes) that you can see review the questions twice within the life cycle of the question.

There is an Assessment Development Committee for each grade level and content area and a Bias and Sensitivity Committee for grades 3-10. Both committees are tasked with ensuring that the questions on the MCAS tests are grade-level appropriate, accurate, and aligned to the Massachusetts State Curriculum Frameworks and free from bias.

Let's review this process.

The questions are first submitted to DESE from the MCAS testing contractor. Once received, test developers at DESE will review each question before they are brought to the ADC for review. As mentioned earlier, the educators on the ADC review the questions for alignment to the state standards, grade-level appropriateness, etc. At the ADC meetings, questions are edited as

needed, based on educator feedback. Questions can be accepted as is, accepted with edits or rejected. All questions that are accepted or accepted with edits are then reviewed by members of the BSC. The BSC then reviews the questions to identify and make recommendations for any bias or sensitive concerns. At the BSC meetings, questions are edited as needed, based on feedback. Questions can again be accepted as is, accepted with edits or rejected.

Questions that are cleared to move forward, in the process, are moved to a Field Test Eligible Bank. Any question in the Field Test Eligible Bank can be selected to be field tested during any given test administration. However, before the questions are included on the MCAS test for field testing, they are reviewed for content and grammar by content experts from higher education and editorial staff from both DESE and the testing contractor.

Once the questions are field tested during Test administration (green box), the test is separated into operational and field test questions. The operational questions that count towards the students' scores are scored and the results are sent to the districts. The multiple choice and technology enhanced field test questions can be machine-scored, but the constructed response field test questions enter the next part of the cycle known as Benchmarking where samples of student work are reviewed and compiled in preparation to train scorers. I will explain this process in depth in a later slide. Once the student responses are benchmarked, they are then scored by hundreds of trained scorers, and the data for all field test questions are forwarded to another meeting with the ADC and the BSC for review.

The ADC and the BSC then review the data for each field test question using parameters provided by DESE such as determining if a question was too difficult and/or if a question was not accessible to students at all levels. Questions are either accepted or rejected at these meetings. Rejected questions can be field tested again with edits at the recommendation of the ADC or the BSC. Accepted questions cannot be edited and are then moved to a Common Eligible bank which means that they can be used as an MCAS operational question where they count towards a student's score.

From beginning to end, this process takes about two years, and as you can see, educators play an integral role throughout the process.

Slide 4 – Constructed Response Questions

Unlike selected response and short answer questions, students can write, show, and/or explain their strategies used when answering constructed response questions.

MCAS constructed response questions are made up of multiple parts and are typically scaffolded to make the question assessable to all students. Students must answer all parts correctly to receive full credit. Responses are scored holistically, based on their understanding of the standards from 0 to 4 points in grades 6, 7 and 8.

Slide 5 – Things to Know
In constructed response questions, students do not lose credit for spelling, grammar, and punctuation. Student responses need not be complete sentences. If a question asks a student to

find the perimeter of a figure, and the student correctly finds the perimeter and the area, only the perimeter will be scored. Any information not related to what is being asked is ignored.

In some of the sample student responses that you will see in later slides, you will learn that students can use an incorrect answer from part A correctly in subsequent parts and receive credit in those parts. That is, students can receive credit for correctly solving part B with an incorrect answer from part A.

Students may receive 0 to 4 points in grades 6, 7 and 8. All assigned points are whole number points. A student will never receive a score, for example of 2.5.

Students can respond to constructed response questions in multiple ways. One student may choose to show all their calculations, while another student may choose to explain step by step how they determined their answer.

Slide 6 – Benchmarking Process

I referenced the Benchmarking process in my review of the Life Cycle of an MCAS Mathematics question. Once test administration is completed, hundreds of student responses for the field test constructed response questions are gathered and sent to test developers at DESE and the testing contractor. Each test developer reviews the responses, and scores them ahead of a Benchmarking meeting. At the meeting, the scores along with all the various strategies demonstrated by the students are discussed and compiled to create training materials that will then be used to train scorers.

The training materials consists of the question, the scoring guides, student work that show a range of scores and types of calculations, computations and explanations, detailed instructions that are referred to as scoring notes on how to score said responses, and notes on how to distribute points. For instance, how can four points be distributed in a constructed response question that has three parts.

Slide 7 – Scoring Process

The scoring process is thorough and rigorous.

All MCAS scorers must have content expertise and cannot be Massachusetts educators. Scorers are trained or instructed on the grade level question that they would score. That is, if a scorer is trained to score a specific grade 6 question, that does not mean that they can score **all** grade 6 questions.

Each question has a specific set of training materials, some of which you will see today. Scorers must qualify to score each question before they can score what is called 'live' student responses. To qualify, scorers must demonstrate that they understand the expectations at each score point by accurately and consistently scoring on two rounds of practice responses. If scorers do not qualify to score a question, they cannot score any 'live' responses for that question.

To ensure continued accuracy during live scoring, many responses are scored by more than one scorer. Scorers are also continuously monitored using measures such as read behinds and embedded responses. A read behind is when a member of scoring leadership reads a response after a score has been submitted. Embedded responses are like field test questions. They are student responses that have already been scored that are embedded in the student responses that scorers are scoring. Scorers do not know which responses have previously been scored. If scorers fail to adhere to the standard and overall expectations that have been set, they are coached or retrained and given a second opportunity to score the same question. If they fail a second time, after being retrained, they are excused from scoring the question and all their previously scored responses are returned to the scoring pool to be scored again.

For live scoring, scorers are provided with the question.
➢ They review the sample response which includes possible responses that students might include.
➢ They review the scoring guide which articulates expectations at each score point.
➢ They review student responses for each score point, and
➢ They review scoring notes that were created during the Benchmarking process.

I will begin to explain these components in the next few slides.

Slide 8 – Instructions to review Question 1: 7-RP.A.1 (Released 2023)

Let's review the first constructed response question. This question is a grade 7 question aligned to the Ratios and Proportional Relationships domain and was released in 2023.

First, I will review the question, along with the sample response, the scoring guide, the scoring notes, and student work responses at each score point, and then you will review and practice independently scoring some student response responses for this question.

Slide 9 – Question

This Grade 7 question assesses 7.RP.A.1 which involves analyzing proportional relationships and using them to solve problems; and computing unit rates associated with ratios of fractions. Right at the beginning, we are given the information that Hank was hired to paint all the rooms in a hotel, that he will paint 3 hotel rooms every 7½ hours, and that he will paint at the same rate until the job is complete.

Part A asks for the number of hours it will take Hank to paint 6 hotel rooms. Students need to realize that this is a proportional relationship and then use the ratio that was provided to solve the problem. Students are asked to show work or to explain their answer.

Part B asks for the number of hours it will take Hank to paint 1 hotel room, so now students must compute the unit rate using the ratio that was provided. Students are asked to show work or to explain their answer.

Part C asks for an equation that can be used to find h, the number of hours it will take Hank to paint r hotel rooms, so students must generalize the proportional relationship and know that the unit rate is what will be used in the equation. Only the equation is required in the answer space.

Part D asks for the total number of rooms in the hotel, given that it will take Hank 1,200 hours to paint all the rooms. Students can use the equation they wrote in Part C, substitute1200 hours for h, and then solve the equation for r to find the total number of rooms. Students are asked to show work or to explain their answer.

Slide 10 – Sample Response

This is the Sample Response used to score the Student Responses. It's the "starting point" for scoring a Student Response. When writing the Sample Response for a question, we use what we think will be a "common" student response.

Almost always there are multiple ways to arrive at the correct answer. We generally ask students to "show or explain" how they got their answer so we try to look for all the different ways a student may answer the question.

In Part A, we expect the students to note that 3 x 2 = 6, so then they would calculate 7½ x 2 = 15 to show that it would take Hank 15 hours to paint 6 rooms. Any other mathematically valid work or explanation that results in the answer 15 hours would be acceptable.

In Part B, the students can use their answer of 15 from part A, such that 15 ÷ 6 = 2.5 to show that it would take Hank 2½ hours to paint 1 room. Again, any other mathematically valid work or explanation that results in the answer 2½ hours would be acceptable.

In Part C, h = 2.5r, is an acceptable correct equation and no work or explanation is required.

In Part D, the student can substitute the 1200 into their equation from part C, such that 1200 = 2.5r; so Hank would paint 480 rooms in 1200 hours.

Slide 11 – Scoring Guide

Each constructed response question includes a Scoring Guide. The scoring guides for each question differ from others in only a few places, as highlighted on this slide.

Most Scoring Guides have a second 4-point sentence (3-point in grade 3), which is unique to the question. On this slide, the extra sentence is underlined in red. This sentence describes what the student who received four points on this question did to earn those points.

Each scoring guide also contains a statement that includes the standard, or parts of the standard that are assessed in the question. On this slide, the extra sentence is underlined in green.

The domain, circled in blue, appears in each score point. In this question, the domain being assessed is Ratios and Proportional Relationships. You will also notice that the scoring guide categorizes the responses with the terms exemplary, good, fair, minimal, and "insufficient evidence of an understanding" to differentiate between the different scores the student may achieve.

Slide 12 – Scoring Notes

Another tool that scorers use is a set of Scoring Notes provided by us. This is developed during the Benchmarking process that was mentioned earlier. After looking at multiple student responses, a group of Test Developers from DESE and our contractor compile these notes. It gives the scorers clarification on what we will accept or will not accept as correct answers. The Scoring Notes help to make the scoring more "black and white" rather than having any "gray" areas where the scorer may be unsure of how to score.

Part A, as you can see, does not have any scoring notes, which means we found that there weren't any gray areas in scoring this part that could cause confusion for scorers, so the sample response for Part A is sufficient.

Part B shows the equivalent answers that are possible, and acceptable.

In Part C, the answer here can be correct based on an incorrect answer from Part B. For example, if the student answered "2.75 hours" in Part B (instead of "2.5") but then showed an equation of "h = 2.75r" in Part C, since they've already lost credit for their answer in Part B, we do not penalize the student twice. They will be able to get full credit for the equation "h = 2.75r" based on their answer in Part B.

There are a number of other notes for Part C that let scorers know things that are acceptable and things that are not acceptable. For instance, any equivalent equation is acceptable for full credit, but there's no credit for: giving an expression instead of an equation, swapping the positions of the variables in the equation, and changing the letters used as the variables in the equation without defining the variables.

In Part D, the answer can be correct based on an incorrect equation in Part C. You will also notice the note that students can receive full credit here for a correct answer with no work or explanation. That was a decision that was made at benchmarking. However, please note that it is important that your students continue to show their work or explanation when asked to do so.

There are also some parameters for "Answer Only" credit. We believe that if the student has the correct answer, then they must have done the correct work on their response. Note that answer-only is only possible in parts A, B and D, but as mentioned before, answer only in part D is full credit. Unless decided otherwise, answer-only is typically reviewed for partial credit.

We try to make it as easy as possible for scorers to stay consistent with their scoring.

Now, we will review a set of response responses that show examples of student responses at every score level.

Slide 13 – Score: 4

This is an example of a 4 score. We will review parts C and D on the next slide.

In part A, the response shows the correct answer with work shown.

In part B, the response shows a correct answer, that it would take 2 hours and 30 minutes. In the work, the student converted hours to minutes, and then converted the minutes back to hours. Although this is an unnecessary step, it does not show any misunderstanding, and the final answer is correct.

Slide 14 – Score: 4 Continued

In part C, the response shows the correct equation. Again, no work is necessary.

In part D, the response shows the correct answer and then shows the correct sequence of calculations the student performed after substituting 1200 into their equation from Part C.

This response earns a score of 4 for all parts correct.

Slide 15 – Score: 3

This is an example of a 3 score. We will review parts C and D on the next slide.

In part A, the response earns full credit. Scorers are trained to read along with the student, so in this response, the "6 =15" was interpreted as 6 rooms painted in 15 hours.

In part B, the response earns full credit. The student's explanation was again interpreted to reflect what is being asked.

Slide 16 – Score: 3 Continued

In part C, the student swapped the positions of the variables. Based on the Scoring Notes, part C earns no credit.

In part D, the student used their incorrect equation from Part C, correctly substituted 1200 for h, and then correctly solved for r, to get 3000 hotel rooms. This response earns full credit for correctly using their equation from Part C. So overall this response shows a "good" understanding of the standard.

This response earns a score of 3 for Parts A, B, and D.

Slide 17 – Score: 2

This is an example of a 2 score. We will review parts C and D on the next slide.

In part A, the response earns full credit. This student added $7\frac{1}{2}$ instead of multiplying by 2.

In part B, the response earns full credit for the correct answer with work shown.

Slide 18 – Score: 2 Continued

Parts C and D do not earn credit.

This response earns a score of 2 for Parts A and B.

Slide 19 – Score: 1

This is an example of a 1 score.

Parts A and B did not earn any credit.

In part C, the response earns full credit for a correct equation using the incorrect answer from Part B. This is okay per the scoring notes.

In part D, the response earns no credit.

This response earns a score of 1 for Part C.

Slide 20 – Score: 0

This is an example of a 0 score.

In part A, the response started out on the right track (knowing to find "half" of 6), but then the student didn't follow through correctly. There isn't enough work/explanation provided by the student to show any proof of understanding. This response shows "insufficient evidence".

In part B, there is no credit.

In part C, there is no credit.

In part D, there is no credit.

This response earns a score of 0.

Slide 21 – Instructions for Individual Practice

Now that you have been trained on how to score question 1, please gather the question, the sample response, the scoring guide, and the scoring notes. These resources are essential when scoring responses. Scorers have these readily available and refer to them as they score each response. Analyze the training responses that were just reviewed, and then independently practice scoring the five practice response responses that are included on pages 13 through 17 in your packet. As you read each response, choose the score that best represents the response. You will follow this process for each response.

You may pause the presentation and score responses A through E. When you have read and scored each response, you may resume the presentation for the scoring of the response.

Slide 22 – Practice Response A

Thank you for taking the time to score each of the student responses. Here is response A which is on page 13 of the training packet. This response received a score of 2.

Parts A and B earn full credit for the correct answers and showing the correct work.

Parts C and D do not earn any credit.

Slide 23 – Practice Response B

Here is response B which is on page 14 of the training packet. This response received a score of 4.

Parts A, B, C, and D all earn full credit for the correct answers and showing the correct work where it was asked for. Note that in Part C, the equation provided by the student is one of the equivalent equations mentioned in the Scoring Notes.

Slide 24 – Practice Response C

Here is response C which is on page 15 of the training packet. This response received a score of 1.

In part A, the response is what we refer to as "answer-only". The student provided the correct answer but did not show any work or explanation. We made the decision at our Benchmarking meeting that "answer-only" responses in part A would still earn 1 point.

Parts B, C, and D do not earn any credit.

Per the Scoring Notes, this response earns a score of 1 for Part A.

Slide 25 – Practice Response D

Here is response D which is on page 16 of the training packet. This response received a score of 0.

Parts A, B, C, and D do not earn any credit.

Slide 26 – Practice Response E

Here is response E which is on page 17 of the training packet. This response received a score of 3.

Parts A and B earn full credit for the correct answers and showing and explaining the correct work.

Part C does not earn credit. Note that the student used "2/5" instead of "5/2".

In part D, the response earns full credit for the correct answer and work. The student did not use their incorrect equation from Part C but, instead, they correctly used the unit rate that they found in Part B.

This response shows a "good" understanding of the standard.

Slide 27 – Instructions to review Question 2: 8-F.B.4 (Released 2023)

Similar to what I did with question 1, I will now review a second constructed response question. This question is a grade 8 question aligned to the Functions domain which was released in 2023.

Again, I will review the question, along with the sample response, the scoring guide, the scoring notes and student work responses at each score point, and then you will review and practice independently scoring some student response responses for this question.

Slide 28 – Question

This Grade 8 question assesses 8.F.B.4 where students are required to construct a function to model a linear relationship between two quantities.

The question begins with a table of values that shows a linear relationship between x and y.

Part A asks for the y-intercept of the line represented by the relationship shown in the table. Students are asked to show work or to explain their answer.

Part B asks for the slope of the line represented by the relationship shown in the table. Students are asked to show work or to explain their answer.

Part C asks for an equation of the line represented by the relationship shown in the table. Only the equation is required in the answer space.

In Part D, students are given the coordinates of a point and are then asked to confirm whether the point lies on the line represented by the relationship shown in the table. Students are again asked to show work or to explain their answer.

Slide 29 – Sample Response

This is the Sample Response we used to score the Student Responses for this question. Remember, this is just one set of possible ways to correctly answer the parts in this question.

In Part A, we expect the students will note that from the table, they can see that when x=0, y=5.

Therefore, the y-intercept of the line is 5. Any other mathematically valid work or explanation that results in the answer 5 would be acceptable.

In Part B, the students can use the slope formula to calculate the slope of the line. They can first select two coordinate pairs from the table, such as (-2, 10) and (-1, 7.5), and then substitute the appropriate x and y values into the formula to show the change in y over the change in x as shown. This results in a slope of –2.5. Note that any other mathematically valid work or explanation that results in the answer –2.5 would be acceptable.

In Part C, y = -2.5x + 5, is an acceptable correct equation and no work or explanation is required. Students should be able to use the slope and y-intercept to create the equation.

In Part D: The student can substitute the point (9, -17.5) into their equation from Part C as shown.

Substituting the coordinate point into the equation from Part C to make sure both sides of the equal sign are in-fact equivalent was the most common way of finding the answer.

Slide 30 – Scoring Guide

Similar to the previous scoring guide, the extra sentence for this question is underlined in red, the standard is underlined in green, and in this case, the domain, Functions is circled in blue.

Slide 31 – Scoring Notes

These are the scoring notes for this question.

These scoring notes begin with the answer-only designations.

Part A shows the equivalent ways of giving the y-intercept that are all acceptable, as well as the variety of explanations that students gave for what the y-intercept is.

In Part B, we found that students showed their work for finding the slope of the line in different ways. As long as we saw a correct strategy along with the slope in the response, the response received full credit.

In Part C, it was possible to have a correct equation based on an incorrect answer in either Part A, or Part B, or both. As I mentioned in the Sample Response, we are assessing students' knowledge of how to write an equation of a line when both the y-intercept and the slope are known. Therefore, if a student was able to write a correct equation (albeit with incorrect y-intercept and slope) then we noted that the student successfully showed us the knowledge we are looking for in Part C. The student would already have lost credit in both Parts A and B for incorrect answers, but the student would earn a point for their equation in Part C.

In Part D, because the question being asked is dichotomous (that is, the answer is either "Yes" or "No"), there must be work or explanation along with the answer for full credit. There is no opportunity here for partial credit or answer-only credit.

As I mentioned in the Sample Response, the most common method shown in Part D was substituting the given coordinate pair into their equation from Part C. However, another very common method was continuing the pattern shown in the table until reaching 9 for the x-value and -17.5 for the y-value.

The last note for Part D is that the response for this part can be correct based on an incorrect equation in Part C. If the student can show us understanding of how to use the equation of a line to check whether a certain point lies on that line, then that is what we are looking for. The student already lost credit for the incorrect equation in Part C

Slide 32 – Score: 4

This is an example of a 4 score. We will review parts C and D on the next slide.

In Parts A and B, we see the correct answers and clear explanations.

Slide 33– Score: 4 Cont'd

Part C shows a correct equation for full credit.

In Part D, the student substituted the coordinate point correctly into the equation from part C.

This response earns a 4 score for parts A, B, C, and D.

Slide 34 – Score: 3

This is an example of a 3 score. We will review parts C and D on the next slide.

Part A is incorrect. With the answer to Part B being -2.5, if reading through a response too quickly it's easy to see the familiar number and think that this is correct. However, this part gets no credit.

In part B, the response earns full credit for the correct answer and work.

Slide 35 – Score: 3 Continued

In part C, the student has a correct equation and did not use their incorrect y-intercept from Part A. This response includes an explanation, although it wasn't required. The explanation is correct, and supports the equation, so this part earns full credit.

In part D, the response earns full credit for the correct answer and work. Like the previous response for part D, this student also substituted the coordinate point into their equation from Part C.

This response earns a score of 3 for Parts B, C, and D.

Slide 36 – Score: 2

This is an example of a 2 score. We will review parts C and D on the next slide.

In part A, the response is a correct answer of 5, but the student did not include any work or explanation. As we noted in the Scoring Notes, answer-only in this part would still earn 1 point.

In part B, the response is incorrect and earns no credit. Recall that the correct answer is -2.5.

Slide 37 – Score: 2 Continued

In Part C, the student provides an equation and it appears that the student used their correct y-intercept and incorrect slope from Parts A+B. However, those two values are reversed in the equation, so this response earns no credit.

In part D, the response earns full credit for correctly substituting the coordinate point into their incorrect equation from Part C. The student showed us that they understand how to use the equation of a line to test whether a certain point lies on that line. Based on their correct calculations, the two sides of the equation do NOT equal each other, so the answer of "No" is in fact correct.

This response earns a score of 2 for Parts A and D.

Slide 38 – Score: 1

This is an example of a 1 score. We will review parts C and D on the next slide.

Both Parts A+B are incorrect and earn no credit.

Slide 39 – Score: 1 Continued

Part C is also incorrect and earns no credit.

In Part D, the student has the correct answer and shows us (very clearly) how they continued the pattern in the given table to arrive at their correct answer.

So, this response earns a score of 1 for Part D.

Slide 40 – Score: 0

This is an example of a 0 score. We will review parts C and D on the next slide.

 Both Parts A+B are incorrect and earn no credit.

Slide 41 – Score: 0 Continued

Part C earns no credit. The student wrote an equation, but it is incorrect.

Part D also earns no credit. The student answered the question, "Yes", but without work or an explanation to support the answer, the response earns no credit.

No credit in Parts A, B, C, or D receives a score of 0.

Slide 42 – Instructions for Individual Practice

Once more, having been trained on how to score question 2, please gather the question, the sample response, the scoring guide, and the scoring notes. These resources are essential when scoring responses. Scorers have these readily available and refer to them as they score each response. Analyze the training responses that were just reviewed, and then independently practice scoring the five practice response responses that are included on pages 29 through 33 in your packet. As you read each response, choose the score that best represents the response. You will follow this process for each response.

You may pause the presentation and score responses A through E. When you have read and scored each response, you may resume the presentation for the scoring of the response.

Slide 43 – Practice Response A

Thank you again for taking the time to score each of the student responses. Here is response A which is on page 29 of the training packet. This response received a score of 3.

In part A, there is full credit for answer and explanation.
In part B, there is no credit. Incorrect answer and shows the wrong strategy.
In part C, there is full credit. Here, the student correctly created an equation using their correct y-intercept and incorrect slope from Parts A and B.
In part D, there is full credit. The student noted that they continued the pattern in the given table until x was 9 and y was -17.5. This is sufficient for full credit.

This response earns a score of 3 for Parts A, C, and D.

Slide 44 – Practice Response B

Here is response B which is on page 30 of the training packet. This response received a score of 1.

There is no in part A.
Part B has full credit for correct slope and work.
There is no credit in part C.
There is no credit in part D.

This response earns a score of 1 for Part B.

Slide 45 – Practice Response C

Here is response C which is on page 31 of the training packet. This response received a score of 4.

This response received full credit in all parts for correct answers and explanations. Note that in part A the y-intercept written as the coordinate point (0, 5) is correct per the scoring notes.

Slide 46 – Practice Response D

Here is response D which is on page 32 of the training packet. This response received a score of 0.

There is no credit in any part of this response.

Slide 47 – Practice Response E

Here is response E which is on page 33 of the training packet. This response received a score of 2.

In part A, there is full credit for correct y-intercept and explanation.
There is no credit in part B. It should be -2.5.
There is no credit in part C. The equation does not include both the slope and the y-intercept.
In part D, there is full credit. The student explained how they continued the pattern in the given table until x was 9 and y was -17.5 which is sufficient for full credit.

This response earns a score of 2 for Part A and Part D.

Slide 48 – Resources on the Website

The following are links to resources that would be helpful as you prepare your students for test administration.

- For all MCAS headlines and/or additional information such as MCAS administration dates, accommodated forms and the calculator policy for grades 7 and 8, please use the link listed for *MCAS headlines and links to MCAS site*.
- The Mathematics Test design provides information on the number of questions, the types of questions, and the percentages of reporting categories that can be found on each math test. Use the *Mathematics Test Designs* link to access the test designs for all grade levels.
- Each year, samples of student responses for each of the released constructed response questions are posted on the website. Use the *Student Work Sample* link to access sample student work for released constructed response questions.
- For grades 6-8, 50% of the questions assessed on the test are released. Use the *Release Questions* link for access to released questions.
- In addition to the released questions, there are practice test questions for each grade level. These practice tests include examples of each question type in the testing platform that students may encounter during testing, and a session just like the administered test where a calculator can be used. Students can also access an online tutorial to learn how to navigate the online system. Use the link listed to access both the *Practice Tests and the Tutorial.*

Slide 49 – Contact Information

For policy questions, test design questions and/or accommodation questions or concerns before, during or after test administration, please email us at mcas@mass.gov or call us at 781-338-3625.
Also, during test administration, you can also contact the MCAS Service Center for questions at 1-800-737-5103.

Slide 50 – Thank You

I appreciate you taking the time to listen to our presentation on the Scoring of Middle School MCAS Constructed Response Questions. I hope your students are successful in the upcoming MCAS Mathematics administration.