

Math  
Released Item 2019

Grade 3

Given Three Numbers  
M01036

# Anchor Set A1 – A10

With Annotations

# Prompt

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Enter your explanations and your examples in the space provided.



▼ Math symbols

+	-	×	÷
$\frac{\square}{\square}$	$\square \frac{\square}{\square}$	(.)	[.]
=	<	>	≠
\$	°	?	

## M01036 Rubric

Score	Description
<b>4</b>	<p>Student response includes the following 4 elements.</p> <ul style="list-style-type: none"> <li>• <b>Reasoning component</b> = 1 point                             <ul style="list-style-type: none"> <li>○ Valid explanation why Kyle’s answer is correct</li> </ul> </li> <li>• <b>Reasoning component</b> = 1 point                             <ul style="list-style-type: none"> <li>○ Valid explanation why Kyle’s reasoning is incorrect</li> </ul> </li> <li>• <b>Computation component</b> = 1 point                             <ul style="list-style-type: none"> <li>○ Example 1</li> </ul> </li> <li>• <b>Computation component</b> = 1 point                             <ul style="list-style-type: none"> <li>○ Example 2</li> </ul> </li> </ul> <p>Sample Student Response:</p> <p style="padding-left: 40px;">Kyle is correct that his number is larger than Tara’s number, but his reasoning is incorrect. When comparing you start with the largest place value which would be the hundreds, not the tens. Tara’s possible numbers are 205 and 502, which are both less than Kyle’s number.</p> <p>Or other valid response.</p>
<b>3</b>	Student response includes 3 of the 4 elements.
<b>2</b>	Student response includes 2 of the 4 elements.
<b>1</b>	Student response includes 1 of the 4 elements.
<b>0</b>	Student response is incorrect or irrelevant.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

520 Kyle. Kyle's answer is correct because her number would have to be 502 or 205 which are both smaller than 520. His reasoning is wrong because it doesn't really matter if 0 is less than 2 because she could have had a bigger hundreds.

## Annotation

### Anchor Paper 1 Score Point 4

This response receives full credit. The student includes each of the four required elements:

- The student explains that Kyle's answer is correct (because her number would have to be 502 or 205 which are both smaller than 520).
- The student explains that Kyle's reasoning is incorrect (because it doesn't matter if 0 is less than 2 because she could have had a bigger hundreds).
- Example 1 is correct (502).
- Example 2 is correct (205).

Note: The student must make a clear distinction between Kyle's answer being correct and Kyle's reasoning being incorrect by showing an acceptable explanation. Stating Kyle's answer is correct must include a reason which relates to his number being a larger value than Tara's number. Stating Kyle's reasoning is incorrect must include an explanation of place value. Simply stating Kyle is correct or incorrect will be insufficient for credit for the first two elements without a proper explanation. If a correct explanation is provided, then the student will receive credit for the element.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Kyle is correct because 5 is the biggest number out of 0, 2, and 5. He put the numbers in order from biggest to smallest. Since Tara has a 0 in the tens, that means she did not put them in order like Kyle. The number can't be bigger than 520. Tara's number is either 502 or 205. Both of them are less than 520.

## **Annotation**

### **Anchor Paper 2 Score Point 4**

This response receives full credit. The student includes each of the four required elements:

- The student explains that Kyle's answer is correct (Tara's number is either 502 or 205. Both of them are less than 520).
- The student explains that Kyle's reasoning is incorrect (He put the numbers in order from biggest to smallest. Since Tara has a 0 in the tens, that means she did not put them in order like Kyle). This contradicts Kyle's reasoning because place value is why his number is greater.
- Example 1 is correct (502).
- Example 2 is correct (205).



Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Kyle is right. Her number will be less because 205 or 502 are both less than 520. But not because 0 is less than 2. It depends on the place it's in.

## **Annotation**

### **Anchor Paper 3 Score Point 3**

This response receives partial credit. The student includes three of the four required elements:

- The student explains that Kyle's answer is correct (because 205 or 502 are both less than 520).
- Example 1 is correct (205).
- Example 2 is correct (502).

The response does not adequately explain that Kyle's reasoning is incorrect (It depends on the place it's in). The explanation is too vague and needs to indicate that the hundreds place is of greater value than the tens place.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

$$520 > 502$$

$$520 > 205$$

kyles answer was correct because 520 is bigger than 502 and 205

## **Annotation**

### **Anchor Paper 4 Score Point 3**

This response receives partial credit. The student includes three of the four required elements:

- The student explains that Kyle's answer is correct (because 520 is bigger than 502 and 205).
- Example 1 is correct (502).
- Example 2 is correct (205).

The response does not explain that Kyle's reasoning is incorrect.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

kyle is right because if tara puts a 0 in the tens place than it would be 502 and kyles number is 520 so kyles number would be greater.

## **Annotation**

### **Anchor Paper 5 Score Point 2**

This response receives partial credit. The student includes two of the four required elements:

- The student explains that Kyle's answer is correct (so Kyle's number would be greater).
- Example 1 is correct (502).

The response does not explain that Kyle's reasoning is incorrect.

The response does not include a second example.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

She is right but Tara's number could be 205 or 502.

## **Annotation**

### **Anchor Paper 6 Score Point 2**

This response receives partial credit. The student includes two of the four required elements:

- Example 1 is correct (205).
- Example 2 is correct (502).

The response merely states Kyle is correct but provides no further explanation. Simply stating Kyle is correct or incorrect is insufficient for credit for the first two elements without explanation.

The response does not explain that Kyle's reasoning is incorrect.



Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

kyle's answer is correct because 520 is a higher number than any number that is made out of those numbers with a 0 in the ten's place.

## **Annotation**

### **Anchor Paper 7 Score Point 1**

This response receives partial credit. The student includes one of the four required elements:

- The student explains that Kyle's answer is correct (because 520 is a higher number than any number that is made out of those numbers with a 0 in the ten's place).

The response does not explain that Kyle's reasoning is incorrect.

The response does not include either of the two required examples for Tara's number.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

yes because her number is 502

## **Annotation**

### **Anchor Paper 8 Score Point 1**

This response receives partial credit. The student includes one of the four required elements:

- Example 1 is correct (502).

The response merely states Kyle is correct with an incomplete explanation (because her number is 502). The response needs to explain that Kyle's number is greater than Tara's number.

The response does not indicate that Kyle's reasoning is incorrect.

The response does not include a second example for Tara's number.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

well since 520 has a 2 in the tens place and Tara *had* 0 in the tens place ,2 is greater than 0.so he is correct.

## **Annotation**

### **Anchor Paper 9 Score Point 0**

This response receives no credit. The student includes none of the four required elements:

The response does not explain that Kyle's answer is correct. Simply stating Kyle is correct or incorrect is insufficient for credit for the first two elements without explanation.

The response incorrectly indicates that Kyle's reasoning is correct (2 is greater than 0).

The response does not include either of the two required examples for Tara's number.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

$$2 > 0$$

## Annotation

### **Anchor Paper 10** **Score Point 0**

This response receives no credit. The student includes none of the four required elements:

The response does not explain that Kyle's answer is correct.

The response does not indicate that Kyle's reasoning is incorrect.

The response does not include either of the two required examples for Tara's number.

Instead, the response includes a mathematical relationship statement ( $2 > 0$ ) which is irrelevant to all elements.



# Practice Set

## P1 - P5

No Annotations Included

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Yes, Kyle's reasoning was correct because his number was the highest possible, so either way, *if* tara picked 502 or 205, kyles number would be higher.

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

No, it is not correct because if she has a 0 in the tens place that doesn't mean his is bigger because what if Tara's number had a number in the hundreds place that was bigger than 5 because if it was a 6 then her number would be bigger

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Kyle's answer was correct. He was correct because 520 is greater than 502.



$$520 > 502$$

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Kyle's answer is correct because Tara's number is 502 or 205 and  $520 > 502$  also  $520 > 205$

Kyle and Tara were given the numbers 0, 2, and 5. They were told to make a 3-digit numeral out of the three numbers. Kyle's number was 520. Tara's number had a 0 in the tens place. Kyle said that Tara's number had to be less than his because 0 was less than 2.

Explain whether Kyle's answer was correct. Explain whether Kyle's reasoning was correct. Give examples to support your explanations.

Kyles answer was right because the only possible ways tara could make a number is 205 or 502 so kyle is right.

## Practice Set

<b>Paper</b>	<b>Score</b>
<b>P1</b>	<b>3</b>
<b>P2</b>	<b>1</b>
<b>P3</b>	<b>2</b>
<b>P4</b>	<b>3</b>
<b>P5</b>	<b>2</b>