## MGSE5.NBT.1 (DOK 1)

1

Write the number 6.56 in word form.

Mastar	ID: 3038009 Revision:	8	
Rubric	2 Point(s)	0	
MGSE5.NE 10 times as represents	TORM(3) 3T.1: Recognize that in a multi-digit number, a digit in one place represent s much as it represents in the place to its right and 1/10 of what it in the place to its left.	s	
2	2 Point Response:		
	The student responds correctly with the answer of six and fifty-six hundredths, demonstrating the ability to read and write decimals to thousandths using base-ten numerals, number names, and expanded form.		
1	1 Point Response:		
	Not applicable for this question.		
0	0 Point Response:		
The student responds incorrectly and does not demonstrate the ability to read and write decimals to thousandths using base-ten numerals, number names, and expanded form. Standards: MGSE5.NBT.1			
2 MG	GSE5.NBT.1 (DOK 2)		
Wh	ich value does the model show?		
A. 8	$\frac{32}{00} + \frac{2}{10}$		
B. <u>8</u>	$\frac{1}{0} + \frac{2}{100}$		

- C.  $\frac{8}{10} + \frac{2}{10}$
- D.  $8 + \frac{2}{10}$

Master ID:	3037541 Revision:	2
Correct:	В	
Rubric:	1 Point(s)	
Standards:		
MGSE5.NBT	.1	

### 3 MGSE5.NBT.1 (DOK 2)

Latoya is explaining mathematics to her younger sister. She makes the following statements.

Statement 1: With the number 72,649, the value of the digit in the thousands place is ten times as much as the value of the digit in the hundreds place.

Statement 2: With the number 759.088, the value of the digit in the hundredths place is one tenth of the value of the digit in the thousandths place.

What conclusion can you draw from her statements?

- A. Statement 1 is correct.
- B. Statement 2 is correct.
- C. Both statement 1 and statement 2 are correct.
- D. Neither statement 1 nor statement 2 is correct.

Master ID:	3037540 Revision	: 3
Correct:	В	
Rubric:	1 Point(s)	
Standards:		
MGSE5.NBT.1		

Jasmine says that 0.03 is greater than 0.031, while Bobby says that 0.031 is greater than 0.03. Who is	
correct? Explain and draw a model to support your	
4.032 + 9.17	
Master ID: 3037539 Revision: 6 A.	
Rubric:     2 Point(s)       MGSE5 NBT1:     Reconsize that is a multi-disit number a disit in one place represents       B.     =	
10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	
2 2 Point Response: D. +	
The student responds correctly by stating that Bobby is correct (0.031 > 0.03). The student provides a correct and complete explanation and a model to explain why .031 > .03. Master ID: 3037544 Revision:	7
Explanation: Correct: C	
.031 is thirty-one thousandths, and .03 is three tenths, which is equivalent to thirty thousandths. Add a zero to .03, which doesn't change the value, and the numbers are:	
.031 7 MGSE5.NBT.3.b (DOK 2)	
Compare the digits to the thousandths place, and .031 is larger. Review the model the student drew to support this conclusion Write 3 numbers that are greater than 1 637 bu	t less
than 2.457. Write the numbers from least to gre	atest.
1 1 Point Response:	
0.03). The student, though, provides an incomplete, unclear, or incorrect	
explanation and model to explain why .031 > .03. Master ID: 3034855 Revision:	5
0 0 Point Response: Rubric: 2 Point(s)	two
The student responds incorrectly, and the explanation and model are incomplete, unclear, incorrect, or not included.	>, =,
Standards: 2 2 Point Response:	
The student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, and writes those numbers correctly in order from least to greatest.         5       MGSE5.NBT.3.a (DOK 2)	at are
6 (10,000) + 5 (1,000) + 8 (100) + 2 (10) + 4 (1) + 6 The student should demonstrate understanding of place value and correctly compare decimals to the thousandths place.	I how to
$(\overline{10}) + 9(\overline{100})$	
Which value below shows the above number rounded 1.937	
to the nearest tenths place?	
A. 65,824.07	
B. 65,824.7 1 Point Response:	
C. 65,824.69 The student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the student responds correctly by accurately stating 3 numbers the greater than 1.637, but less than 2.457, but does not write those in the state of the state	at are umbers
D. 65,825.00 in order from least to greatest.	
0 0 Point Response:	
Master ID: 3037542 Revision: 2 The student responds incorrectly, and does not demonstrate the a	bility to
Correct: B from least to greatest.	51001
Rubric:     1 Point(s)       Standards:	
Standards: MGSE5.NBT.3a MGSE5.NBT.4 MGSE5.NBT.3D	

### 8 MGSE5.NBT.3 (DOK 3)

The table below shows the free throw shooting averages for different basketball teams.

Team	Free Throw Shooting Average
Panthers	.432
Tigers	.485
Trojans	.569
Wolves	.679
Mustangs	.589

a.) Based on the data, which team currently has the highest free throw shooting average?

b.) Suppose you rounded the averages to the nearest hundredth. Would you be able to accurately identify which team currently has the highest free throw shooting average? Justify your answer.

c.) Suppose you also rounded the averages to the nearest tenth. Would you be able to accurately identify which team currently has the highest free throw shooting average? Justify your answer.

Master ID:	3037543 Revision:	4
Rubric:	4 Point(s)	

MGSE5NBT.3: Read, write, and compare decimals to thousandths. a.) Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g.,  $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/100) + 9 \times (1/100) + 2 \times (1/1000)$ . b.) Compare two decimals to thousandths based on meanings of the digits in each place, using  $x_i = and < symbols$  to record the results of comparisons.

### 4 4 Point Response:

The student responds completely and correctly to parts A, B, & C, including providing accurate explanations in parts B & C.

Correct Responses & Explanations:

a.) The Wolves have the highest average. The student should demonstrate how to correctly compare decimals to the thousandth place.

In order from least to greatest:

Panthers - .432

Tigers - .485

Trojans - .569

Mustangs - .589

Wolves - .679

b.) Yes, the team with the highest free throw shooting average can still be identified, when rounding each average to the nearest hundredth.

Each number rounded to the nearest hundredth:

Panthers - .432 = .43

Tigers - .485 = .49

Trojans - .569 = .57 Mustangs - .589 = .59

Wolves - .679 = .68

Explanation:

None of the averages are equivalent to each other when they are rounded or compared to the hundredths place. Each average contains a unique number in the hundredths place. Thus, the averages can still be put in order even when rounded.

c.) No, if the averages were rounded to the nearest tenth, the team with the highest free throw shooting average would not be able to be identified. The Trojans and Mustangs have the same average, when rounded to the nearest tenth.

Each number rounded to the nearest tenth:

Panthers - .432 = .4

Tigers - .485 = .5

Trojans - .569 = .6

Mustangs - .589 = .6

Wolves - .679 = . 7

### 3 3 Point Response:

The student responds completely and correctly to 2 of 3 parts (A & B, B & C, or A & C), including providing at least one accurate explanation in parts B and or C.

### 2 2 Point Response:

The student responds completely and correctly to 2 of 3 parts (A & B, B & C, or A & C), but provides incomplete, unclear, or incorrect explanations in parts B & C.

1 <b>1 Point Re</b> The stude C), and pr & C.	<b>Isponse:</b> nt responds completely and correctly to 1 of 3 parts ( <i>i</i> ovides incomplete, unclear, or incorrect explanations i	A <u>or</u> B <u>or</u> in parts B	1	MGSE5.N The table purchased month of N	BT.4 (DOK 2) below shows tl by customers November.	he number of gallons o at Gas Station X for th	of gas ne
0 0 Point Re	esponse:				Week	Gallons of G	as
The stude in parts B	at responds incorrectly to parts A, B, & C, and the exp & C are incomplete, unclear, incorrect, or not included	blanations J.		-	Week1	98,710	
Standards:					Week 2	74.63	
MGSE5.N	BT.3				Week 3	67.596	-
9 MGSE5.NI	3T.4 (DOK 2)				Week 4	105.3	
<ul><li>pounds of chips, and amount of cookies.</li><li>A. 7 lbs.</li><li>B. 8 lbs.</li><li>C. 9 lbs.</li></ul>	chocolate chips, 0.8 pounds of pear 3.7 pounds of walnuts. Estimate the pounds of ingredients he needs to r	nut butter e total nake his A E C	L. 5. 2.	Find the to and 3. The 166.30 ga 166.31 ga 173.30 ga 173.34 ga	otal gallons of g en round the to allons allons allons allons	gas purchased for wee tal to the nearest hund	ks 1 dredth.
D. 12 lbs.		Ν	/las	ster ID:	3037	545 Revision:	2
Master ID: Correct: Rubric: Standards: MGSE5.N	3037546 Revision: C 1 Point(s) BT.4	2 F S	tan	ric: ndards: MGSE5.N	1 Point(s) IBT.4		
10 MGSE5.NI Susan wer a bookshe iron for \$19 and detern	3T.4 (DOK 2) It to the store and bought a chair for If for \$21.32, a microwave for \$34.59 9.47. Round each item to the neares nine how much she spent.	\$17.95, 9, and an st tenth					
A. \$93.30							
B. \$93.40							
C. \$93.50							
D. \$94.00							
Master ID: Correct: Rubric: Standards: MGSE5.N	3037547 Revision: B 1 Point(s) BT.4	2					

## 12 MGSE5.NBT.4 (DOK 3)

John wants to go bowling on Saturday. His mother agrees to pay for John as well as his three friends, but she asks him to find the best deal in the newspaper. The newspaper ad looks as follows:

1	Midtown Bowling	Cherokee Bowling	Lakeside Bowling	Hightower Bowling
	\$7.55	\$6.65	\$5.25	\$6.62

### Answer the following questions:

a.) Rounding your answer to the nearest tenth, which company's amount rounds to \$26.50 for the children to bowl?

b.) Where should John go bowling for the best deal?

c.) If Midtown Bowling offers \$5 off of your total bill on Saturday, would it be cheaper to go to Midtown Bowling? Explain why or why not.

#### Master ID: 3037548 Revision: Rubric: 4 Point(s)

MGSE5.NBT.4: Use place value understanding to round decimals up to the hundredths place.

#### 4 Point Response: Λ

The student responds completely and correctly to parts A, B, & C, and provides a complete and accurate explanation in part C.

3

Correct Responses & Explanation:

a.) For John and his 3 friends to bowl, the total amount at Hightower Bowling is \$6.62 x 4 = \$26.48. Rounded to the nearest tenth, the amount is \$26.50

Midtown Bowling - \$7.55 x 4 = \$30.20

Cherokee Bowling - \$6.65 x 4 = \$26.60

Lakeside Bowling - \$5.25 x 4 = \$21.00

b.) For the best deal, John and his friends should go to Lakeside Bowling. Lakeside Bowling is the least expensive bowling option.

c.) Midtown Bowling - \$7.55 x 4 = \$30.20 - \$5 on Saturday = \$25.20 This amount is still not cheaper than going to Lakeside Bowling; \$25.20 (Midtown Bowling) is \$4.20 more expensive.

#### 3 Point Response: 3

The student responds completely and correctly to 2 of 3 parts (A&B, B&C, or A&C), and provides a complete and accurate explanation in part C.

#### 2 2 Point Response:

The student responds completely and correctly to 2 of 3 parts (A&B, B&C, or A&C), but provides an incomplete, unclear, or incorrect explanation in part C.

#### 1 1 Point Response:

The student responds completely and correctly to 1 of 3 parts (A or B or C), and provides an incomplete, unclear, or incorrect explanation in part C.

#### 0 Point Response: 0

The student responds incorrectly to parts A, B, & C, and the explanation in part C is incomplete, unclear, incorrect, or not included

## Standards:

MGSE5.NBT.4

## 13 MGSE5.NBT.7 (DOK 2)

Ryan participated in a race that was 10 miles long. He walked the first 2.3 miles. He then ran 4.43 miles. How much further does he need to run in order to finish the race?

- A. 3.27 miles
- B. 3.72 miles
- C. 3.57 miles
- D. 3.67 miles

Master ID:	3037549 Revision:	3
Correct:	А	
Rubric:	1 Point(s)	
Standards:		
MGSE5.	NBT.7	

## 14 MGSE5.NBT.7 (DOK 2)

Sarah's mother gave her \$10 to go to the grocery to buy two items. Sarah bought a loaf of bread for \$2.19 and a gallon of milk for \$4.76. She also wants to buy herself a candy bar for \$1.09.

a.) Estimate to determine if Sarah has enough money left over to buy the candy bar.

b.) Using hundreds grids, construct a model to determine the exact amount Sarah will spend at the store if she buys the bread, milk, and candy bar.

Master	ID: 3037550 Revision: 6					
Rubric	: 2 Point(s)					
MGSE5.N concrete m operations strategy to	BT.7: Add, subtract, multiply, and divide decimals to hundredths, using nodels or drawings and strategies based on place value, properties of , and/or the relationship between addition and subtraction; relate the a written method and explain the reasoning used.					
2	2 Point Response:					
	The student responds completely and correctly to parts A & B.					
	a.) Yes, Sarah does have enough money to buy the candy bar.					
	\$2.19 (bread) estimated to the nearest dollar amount is \$2					
	\$4.76 (milk) estimated to the nearest dollar amount is \$5					
	\$1.09 (candy bar) is about \$1.					
	\$2 (bread) + \$5 (milk) = \$7. Sarah has \$10, and an additional \$1 for the candy bar means that Sarah has about \$1 leftover.					
	b.) The student should provide an accurate model using hundreds grids to determine the exact amount Sarah will spend at the store. The model must show that the student understands decimal place value with regards to utilizing hundreds grids.					
	\$2.19 (bread) + \$4.76 (milk) + \$1.09 (candy bar) = \$8.04					
1	1 Point Response:					
	The student responds completely and correctly to part A or B.					
0	0 Point Response:					
~ -	The student responds incorrectly to parts A & B.					
Standa	Standards:					
I N	/GSE5.NBT.7					

## 15 MGSE5.NBT.7 (DOK 3)

Fill in the boxes to complete the difference.



Justify your answer by explaining the strategy you used to solve and check your answer.

### Master ID:

Rubric:

3038630 Revision: 2 Point(s) 6

MGSE5.NBT.7: Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

### 2 2 Point Response:

The student responds completely and correctly in completing the decimal numbers to make the subtraction equation true. The student provides a complete and accurate explanation regarding the strategy used to solve and check the answer.

Equation:

57.392 - 36.108 = 21.284

Strategy to check the answer:

21.284 + 36.108 = 57.392

57.392 - 21.284 = 36.108

### 1 1 Point Response:

The student responds correctly in completing the decimal numbers to make the subtraction equation true, but provides an incomplete, unclear, or incorrect explanation regarding the strategy used to solve and check the answer.

### 0 0 Point Response:

The student responds incorrectly, and the explanation is incomplete, unclear, incorrect, or not included.

Standards:

MGSE5.NBT.7

# 16 MGSE5.NBT.7 (DOK 3)

Mr. Johnson has \$57.25 left from his paycheck. He paid a 4-week gas bill, spent \$47.28 for food, and deposited \$96.50 in his savings account. If his paycheck was \$308.15, what is the cost of his gas bill per week? Justify your answer using words, numbers, or models.

### Master ID: 3038010 Revision: Rubric: 2 Point(s)

8

MGSE5.NBT.7: Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

### 2 2 Point Response:

The student responds correctly with \$26.78 for the cost of the gas bill per week, and provides a correct and complete explanation/evidence of work using words, numbers, or models.

Explanation/Evidence of Work:

Mr. Johnson begins with \$308.15 - paycheck

\$308.15 - \$47.28 for food = \$260.87

\$260.87 - \$96.50 put in her savings account = \$164.37

164.37 - 57.25 (the money she has remaining) = 107.12

\$107.12 - 4-week gas bill = \$26.78 per week

The student may include a model to justify the response.

### 1 1 Point Response:

The student responds correctly with \$26.78 for the cost of the gas bill per week, but provides an explanation/evidence of work using words, numbers, or models that is incomplete, unclear, incorrect, or not included.

### 0 0 Point Response:

The student responds incorrectly, and the explanation/evidence of work using words, numbers, or models is incomplete, unclear, incorrect, or not included.

### Standards:

MGSE5.NBT.7