Directions: Answer the following question(s).

1 MGSE5.OA. 1 (DOK 3)
Solve and explain your thinking. Show your work and provide a written explanation.
$3[(32-2) \div 2]-2$

2 MGSE5.OA. 1 (DOK 3)
Jerome says that the value of $\mathbf{4 + ( 2 \times 5 ) + ( 6 - 2 )}$ is 22 . Paul says the value is 18 . Who is correct? Explain.

3 MGSE5.OA. 2 (DOK 2)
At the restaurant, Bill and his three friends each ordered hamburger meals, which cost $\$ 5$ each. They shared the dessert, a giant ice cream brownie sundae, which costs $\$ 16$. The total bill was divided so that each friend paid the same amount.

Write an expression that correctly shows how much each person paid, and solve the expression.

4 MGSE5.OA. 2 (DOK 2)
Margaret says that $(\mathbf{8 \times 2}) \div 4+6$ is the same as 8 times 2 divided by the sum of 4 and 10 . John says that she is wrong. What is Margaret's mistake? Explain your thinking.

5 MGSE5.OA. 2 (DOK 3)
Translate the verbal expressions below into numerical expressions and compare using <, >, or =. Justify your thinking.
a.) Multiply 10 by 2 , then divide by 4 and add 7
b.) Add 6 and 2 , then multiply by 6 and divide by 4

6 MGSE5.NBT. 1 (DOK 2)
Compare the following numbers:
A. 3,765
B. 435

Describe how the value of 3 changes in the numbers given above.
A. The value of 3 in A is one hundred times the value of 3 in $B$.
$B$. The value of 3 in $B$ is one thousand times the value of the 3 in A .
C. The value of 3 in $A$ is one hundredth times the value of 3 in $B$.
D. The value of 3 in $B$ is one thousandth times the value of the 3 in A .

7 MGSE5.NBT. 1 (DOK 2)
Arrange these numbers in order from least to greatest.
480.001480 .1480480 .01

8 MGSE5.NBT. 1 (DOK 3) Is the following statement true?
$9.2=9.20=9.200$
Why or why not?

Directions: Answer the following question(s).

9 MGSE5.NBT. 2 (DOK 2)
Four students answered the following word problem:
A camp uses 86 cups of water to make 100 bowls of oatmeal. How much water is used for each bowl of oatmeal?

Jackson stated the answer is $86 \div 10^{0}=86$ cups.
Michelle stated the answer is $86 \div 10^{1}=8.6$ cups.
Yusef stated the answer is $86 \div 10^{2}=0.86$ of a cup.
Nisha stated the answer is $86 \div 10^{3}=0.086$ of a cup.

Which student's answer is correct?
A.

Jackson is correct; $\mathbf{8 6} \div 10^{\mathbf{0}}=\mathbf{8 6}$ cups.
B. Michelle is correct; $86 \div 10^{1}=8.6$ cups.
C. Yusef is correct; $86 \div 10^{2}=0.86$ of a cup.
D.

Nisha is correct; $86 \div 10^{\mathbf{3}}=\mathbf{0 . 0 8 6}$ of a cup.

10
MGSE5.NBT. 2 (DOK 2)
Destini bought a bracelet that costs $\$ 1.23$. Myshaun bought a necklace that costs $\$ 12.30$. Which answer could be used to determine the amount of money that Myshaun spent on her necklace compared to the amount Destini spent on her bracelet?
A. Multiply the value of Destini's bracelet by $10^{\mathbf{0}}$.
B.

Multiply the value of Destini's bracelet by $1 \mathbf{1 0}^{\mathbf{1}}$.
C.

Multiply the value of Destini's bracelet by $10^{2}$.
D. Multiply the value of Destini's bracelet by $10^{\mathbf{3}}$.

11 MGSE5.NBT. 2 (DOK 2)
Fill in the blanks with the correct answer and explain your thinking.

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\(69.58 \div 10=\)
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$69.58 \div 100=$

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$69.58 \div 1,000=0.06958$

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A. The quotients are 695.8 and 6,958 because the products were decreased by \(10^{\mathbf{0}}\) and \(\mathbf{1 0}\).
B. The products are 695.8 and 6,958 because the dividends were increased by \(10^{\mathbf{1}}\) and \(\mathbf{1 0}^{\mathbf{2}}\).
C. The quotients are 6.958 and 6958 because the dividends were decreased by \(10^{\mathbf{1}}\) and \(10^{2}\).
D. The quotients are 6.958 and \(\underline{0.6958}\) because the dividends were increased by \(10^{\mathbf{0}}\) and \(10^{\mathbf{1}}\).

12 MGSE5.NBT. 5 (DOK 2) Compare the following:
A. \(6,345 \times 8\)
B. 50,760

Which of the following statements is true?
A. A is 2 times greater than B.
B. \(B\) is 3 times greater than \(A\).
C. \(A\) and \(B\) are equivalent.
D. \(A\) is inversely related to \(B\).

13 MGSE5.NBT. 5 (DOK 2)
Write and solve a word problem using the following expression.
\(64 \times 32\)

Directions: Answer the following question(s).

14 MGSE5.NBT. 5 (DOK 3)
Four kids in Mr. Paul's class solved the problem 42 x \(34=\) P. Their responses are below:
\begin{tabular}{|c|c|c|c|}
\hline Tyler & John & Mark & Tim \\
\hline \[
\begin{array}{r}
42 \\
\times 34
\end{array}
\] & \[
\begin{array}{r}
42 \\
\times 34
\end{array}
\] & \[
\begin{array}{r}
42 \\
\times 34
\end{array}
\] & \[
\begin{array}{r}
42 \\
\times 34
\end{array}
\] \\
\hline \[
\begin{array}{r}
168 \\
+126
\end{array}
\] & \[
\begin{array}{r}
168 \\
+1280
\end{array}
\] & 168 & \[
\begin{array}{r}
126 \\
+1680
\end{array}
\] \\
\hline 294 & 1428 & & 1806 \\
\hline
\end{tabular}

Whose solution is correct and why? Justify your answer.

15
MGSE5.NBT. 6 (DOK 2)
Which model below shows a correct area model for \(325 \div 25\) ?
A.
\begin{tabular}{|c|c|}
\multicolumn{1}{|c}{} & \multicolumn{1}{c}{\(\mathbf{2 5}\)} \\
\cline { 2 - 3 } \(\mathbf{4}\) & 100 \\
\hline \(\mathbf{4}\) & 100 \\
\hline \(\mathbf{4}\) & 100 \\
\cline { 2 - 3 } \(\mathbf{4}\) & 75 \\
\cline { 2 - 3 } &
\end{tabular}
B.

25
\begin{tabular}{|l|l|}
\hline \(\mathbf{4}\) & 100 \\
\cline { 2 - 2 } \(\mathbf{3}\) & 100 \\
\hline \(\mathbf{4}\) & 100 \\
\cline { 2 - 3 } & 175 \\
\hline
\end{tabular}
C.
\begin{tabular}{|c|c|}
\multicolumn{1}{c}{} & \multicolumn{1}{c}{\(\mathbf{2 5}\)} \\
\cline { 2 - 3 } & 100 \\
\hline \(\mathbf{4}\) & 100 \\
\hline \(\mathbf{4}\) & 100 \\
\hline \(\mathbf{1}\) & 25 \\
\cline { 2 - 3 } &
\end{tabular}
D.
\begin{tabular}{|c|c|}
\multicolumn{1}{c}{} & \multicolumn{1}{c}{\(\mathbf{2 5}\)} \\
\cline { 2 - 3 } \(\mathbf{3}\) & 100 \\
\hline \(\mathbf{3}\) & 100 \\
\hline \(\mathbf{3}\) & 100 \\
\hline \(\mathbf{3}\) & 100 \\
\cline { 2 - 3 } &
\end{tabular}

Directions: Answer the following question(s).
16 MGSE5.NBT. 6 (DOK 2)
Mrs. Rodriguez wants to recarpet the recreation room at the YMCA that she manages. Below are the price quotes from various carpet companies. The dimensions of the recreation room are \(72 \mathrm{ft} \times 30 \mathrm{ft}\).
\begin{tabular}{|c|c|c|c|}
\hline Carpet Masters & Flooring King & Floors DELUXE! & Carpets \& More \\
\hline \[
\begin{gathered}
6 \mathrm{ft} \times 1 \mathrm{ft} \text { roll } \\
\text { for } \$ 1 .
\end{gathered}
\] & \(6 \mathrm{ft} \times 6 \mathrm{ft}\) roll for \(\$ 4\). & \(8 \mathrm{ft} \times 3 \mathrm{ft}\) roll for \(\$ 2\). & \[
\begin{gathered}
6 \mathrm{ft} \times 3 \mathrm{ft} \text { roll } \\
\text { for } \$ 3 .
\end{gathered}
\] \\
\hline
\end{tabular}

Answer the following questions and show your work for each:
a.) Which company should Mrs. Rodriguez choose if she wants the best buy?
b.) How many rolls of carpet are needed to recarpet the recreation room?
c.) What will be the total cost of the carpet?

17 MGSE5.NBT. 6 (DOK 3)
Consider the following equation.
\(938 \div 14=\)
What is the effect on the quotient if the dividend remains the same, but you increased the divisor? Explain your thinking by giving 2 examples of the equation using different divisors.```

