Class Name : 2018 Period 1
Student Name :

Instructor Name : Charleston
Instructor Note :

1. If it takes 6.3 pounds of seed to plant one acre of grass, how many acres can be planted with 6.93 pounds of seed?
2. Solve for $n$.

$$
2=10 n
$$

Simplify your answer as much as possible.
3. Multiply.

$$
4 y(3)
$$

4. A right triangular prism and its net are shown below.
(All lengths are in feet.)

(a) Find the following side lengths for the net.

$$
\begin{aligned}
& A=\quad \mathrm{ft} \\
& B=\square \mathrm{ft} \\
& C=\square \mathrm{ft} \\
& D=\square \mathrm{ft}
\end{aligned}
$$

(b) Use the net to find the surface area of the prism.
$\qquad$
5. Here are the shopping times (in minutes) for each of sixteen shoppers at a local grocery store.

| Shopping times <br> (in minutes) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | 29 | 23 | 16 | 32 | 18 | 26 | 18 |
| 35 | 28 | 19 | 30 | 20 | 27 | 33 | 25 |

(a) Complete the grouped frequency distribution for the data. (Note that the class width is 4 .)

| Shopping times <br> (in minutes) | Frequency |
| :---: | :---: |
| 16 to 19 | - |
| 20 to 23 |  |
| 24 to 27 | - |
| 28 to 31 |  |
| 32 to 35 |  |

(b) Construct a histogram for the data.

6.

The following are the ages of 17 music teachers in a school district.
$26,28,31,32,34,35,37,42,42,44,45,47,54,54,56,57,58$.

Notice that the ages are ordered from least to greatest.
Make a box-and-whisker plot for the data.

7. The 6 students in Mr. James' class were asked how many minutes it takes them to get to school in the morning. Here is what they answered:
$11,16,3,7,12,15$.
Find the median and mean travel times for these students.
If necessary, round your answers to the nearest tenth.
8. At a large museum, there are 90 people in each tour group.

Use this information to fill in the table. Then plot the ordered pairs given by the table.

| Number of tour groups | Number of people |
| :---: | :---: |
| 3 |  |
| 5 |  |
| 6 |  |


9. Write $\frac{3}{10}$ as a percentage.
10. For each value of $u$, determine whether it is a solution to $12<2 u$.

| $u$ | Is it a solution? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 6 | 0 | 0 |
| 10 | 0 | 0 |
| 3 | 0 | 0 |
| 8 | 0 | 0 |

11. Choose the figure that models $5 \div \frac{5}{4}$.

Then use the figure to compute $5 \div \frac{5}{4}$.




$$
5 \div \frac{5}{4}=
$$

$\qquad$
12. It costs $\$ 17.60$ for a pack of 4 padlocks.

Find the unit price in dollars per padlock.
If necessary, round your answer to the nearest cent.
13. A chemist is using 338 milliliters of a solution of acid and water. If $18.2 \%$ of the solution is acid, how many milliliters of acid are there? Round your answer to the nearest tenth.
14. Graph the inequality below on the number line.

$$
y>3
$$


15. A definition of a statistical question is given below.

## Statistical question:

Any question whose answer could involve working with more than one data value.
In each situation below, determine whether the question is a statistical question.

| Situation | Statistical question? |
| :---: | :---: |
| (a) Laura asked one of her classmates, "How long is your arm in inches?" | $\bigcirc$ O ${ }^{\text {O Nos }}$ |
| (b) Greg asked twenty men at a local store, "What is the number of letters in your last name?" | $\bigcirc$ Yes O No |
| (c) Bob asked one of his neighbors, "How many songs did you download last month?" | $\bigcirc$ O O O No |
| (d) Maria asked the students in her class, "How many times did you exercise last week?" | $\bigcirc$ O O O No |
| (e) Charlie asked the people at his work, "How many e-mails did you send out yesterday?" | $\bigcirc$ O O ( No |

# End of Year Quiz \#1 Answers for class 2018 Period 1 

1. 1.1 acres
2. $n=\frac{1}{5}$
3. $12 y$
4. (a) Find the following side lengths for the net.

$$
\begin{aligned}
& A=8 \mathrm{ft} \\
& B=3 \mathrm{ft} \\
& C=4 \mathrm{ft} \\
& D=5 \mathrm{ft}
\end{aligned}
$$

(b) Use the net to find the surface area of the prism.
$108 \mathrm{ft}^{2}$
5.
(a)

| Shopping times <br> (in minutes) | Frequency |
| :---: | :---: |
| 16 to 19 | 4 |
| 20 to 23 | 2 |
| 24 to 27 | 4 |
| 28 to 31 | 3 |
| 32 to 35 | 3 |

(b)

6.

7. Median: 11.5 minutes

Mean: 10.7 minutes
8.

| Number of tour groups | Number of people |
| :---: | :---: |
| 3 | 270 |
| 5 | 450 |
| 6 | 540 |


9. $30 \%$
10.

| $u$ | Is it a solution? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 6 | $\odot$ | $\odot$ |
| 10 | $\odot$ | $\circ$ |
| 3 | $\odot$ | $\odot$ |
| 8 | $\odot$ | 0 |

11. 


12. $\$ 4.40$
13. 61.5 milliliters
14.

15.

| Situation | Statistical question? |
| :---: | :---: |
| (a) Laura asked one of her classmates, "How long is your arm in inches?" | $\bigcirc$ O ${ }^{\text {O }}$ - No |
| (b) Greg asked twenty men at a local store, "What is the number of letters in your last name?" | - Yes O No |
| (c) Bob asked one of his neighbors, "How many songs did you download last month?" | $\bigcirc$ O ${ }^{\text {O }}$ © No |
| (d) Maria asked the students in her class, "How many times did you exercise last week?" | © Yes O No |
| (e) Charlie asked the people at his work, "How many e-mails did you send out yesterday?" | - Yes O No |

