## Go Math CH 12\&13 Practice Test

1. The following box plot represents the number of candy bars sold by individual members of Baird's sixth-grade class.


Which of the following statements, based on the box plot, are true? Select all that apply.
a) More students sold more than six candy bars
b) The upper quartile of the data is 12 candy bars.
c) The most candy bars sold was 20 bars
d) The median number of candy bars sold was six candy bars
e) The fewest candy bars sold was two bars
2. Consider this data set.
$20,8,13,11,14,15,14$
Which box plot displays the data shown?
a)

b)

c)

3. A student needs to select a statistical question to research for a project. Which of the following questions should the student select?
a) How many students in the school were absent on November $1^{\text {st }}$ of this school year?
b) How many days have each of the students in my class been absent this month?
c) How many students in my class were absent last Wednesday?
4. Naomi surveyed her classmates to see how many hours they usually sleep each night. The results are shown in the table.

| 6 | 8 |
| :---: | :---: |
| 7 | 8 |
| 6 | 9 |
| 9 | 5 |

What is the total number of people Naomi surveyed?
5. Sana recorded how many inches of rain fell in her yard each month. The results are in the dot plot shown.


What is the total number of months Sana recorded the rainfall?
6. Five students are asked to find out the number of cars that are owned by each family living on their street.

| Student | Data |
| :---: | :---: |
| Diego | $1,1,1,1,2,2,2$ |
| Mason | $0,1,1,2,2,2,2,3$ |
| TJ | $0,1,1,2,3$ |
| Boston | $1,1,1,2,4,8$ |

Which of the following students reported 5 data points?
7. The following table shows the number of items that Luis purchased at the grocery store, as well as the cost of each item.

| Item | Cost Per Item | Number of Items |
| :---: | :---: | :---: |
| Yogurt | $\$ 1$ | 8 |
| Juice | $\$ 3$ | 5 |
| Cereal | $\$ 5$ | 1 |

How many items did Luis purchase at the grocery store?
8. Good Food Grocery Store looked at the prices that it charged for each type of bread in its store. The results are shown in the histogram below.

9. Ruby kept track of the numbers of pieces of luggage some families were carrying when arriving at an airport. The numbers of pieces of luggage are shown.
$4,3,1,6,4,2,5,5,5,0,1$
Create a dot plot to represent the data.
10. The following box plot represents the test percentage scores of Ms. Her's sixth grade class.


Which of the following statements, based on the box plot, are true? Select two that apply.
a) The median of the scores in Ms. Her's sixth grade is $60 \%$
b) The median of the scores in Ms. Her's sixth grade is $75 \%$
c) The lowest score on Ms. Her's test was about 0\%
d) The highest score on Ms. Her's test was $85 \%$.
11. A real estate agent wants to list the areas of several different plots that she is trying to sell.

Which of the following units would be appropriate for her to use? Select two that apply.
a) Inches
b) Acres
c) Square feet
d) Centimeters
12. Daniel, a sixth grade student, owns a tape measure. Which of the following characteristics could Daniel determine with this tape measure?
a) The heights of the flowers growing in his mother's garden
b) The distances between the Earth and each of the planets
c) The circumferences of a tree in his backyard.
13. The table below shows the number of lessons attended by each member of a band section.

| Section | Data |
| :---: | :---: |
| Brass | $0,1,1,2,3$ |
| Percussion | $1,1,1,2,2,3$ |
| Strings | 1,2 |
| Woodwind | $1,1,1,1,2$ |

Which of the following statements is true regarding this data set?
a) The brass section reported 5 values
b) The four sections reported 18 values.
c) The strings section reported 3 values
d) The four sections reported 19 values
14. Which of the following numerical data sets has an interquartile range of 14 ?
a) $0,3,5,6,11,14$
b) $1,4,6,7,8,10,20,21$
c) $0,2,7,9,12,16,18$
d) $0,1,5,7,9,11,12,17,20$
15. A sixth grade class conducts a survey to determine how many hours students spend playing video games per week. A box plot of their data is shown below

Sixth Grade Video Game Usage


What is the interquartile range?
What is the median?

What is the range?
16. Emily asked each of the people visiting an ice cream truck how old they were. Their ages are shown.
$5,5,7,9,9,11,2,2,15,14,15$
Using the intervals $0-5,6-11$, and 12-17, create a histogram that correctly represents the data.
17. Constantine surveyed some of his friends to find out the lengths of their favorite pop songs. The lengths in minutes are shown.
$3,6,7,8,9$
Create a box plot.
18. Adrik asked some of his classmates how many minutes they spent working on their math homework last night. He created the dot plot below to show his results.


What is the mode?
19. How many observations are in the following data set?

| Friend | Distance Walked to the Park |
| :---: | :---: |
| Gianna | 2 Blocks |
| Carson | 4 Block |
| Giovanna | 7 Blocks |
| Audrey | 2 Blocks |

20. Jimmy and Aidan were given a homework packet of 110 math questions to finish over the summer.

- In July, Jimmy finished $20 \%$ of the questions in his packet
- In July, Aidan finished $40 \%$ of the questions in his packet.

How many more questions had Aidan finished than Jimmy?
21. $22 \%$ of $\qquad$ is 64
22. Write an algebraic expression that represents that sum of twenty-eight and x squared.
23. Select all options that are greater than 14
a) $2^{4}$
b) $2^{2}+1^{0}$
c) $1^{10}$
d) $3^{3}-3$
24. Select the number line that represents all solutions of $x<-13.5$
a)

25. Select two expressions that are equivalent to $4+3 b-b$
a) $4+4$ b
b) $b$
c) $4+2 b$
d) $2(b+2)$
26. Chloe can write 7 paragraphs in 14 minutes. Using the same unit rate, how many paragraphs can Chloe write in 24 minutes?
27. Find the area of this isosceles trapezoid:

28. While at the pet store, Jennifer counted the number of animals in the store. For every 4 dogs in the store, there were 10 cats.
Identify the equivalent ratios of dogs to cats. Select all that apply.
a) $2: 5$
b) $8: 10$
c) $12: 30$
d) $2: 8$
29. The net for a triangular pyramid is shown.


Each face of this pyramid is an equilateral triangle with a side length of 10 centimeters and a height of 8 centimeters. What is the surface area of the triangular pyramid?
30. What is the area of the right triangle, in square centimeters?


