## Go Math Ch. 10 \& 11 Practice Test

1. The points of a rectangle have the following coordinates:

| Point | Coordinate |
| :---: | :---: |
| $S$ | $(-9,2)$ |
| $T$ | $(1,2)$ |
| $U$ | $(1,-3)$ |
| $V$ | $(-9,-3)$ |


2. Use this net of a cube to answer the questions that follow.

a) What is the area of one square?
b) Using the information you found in part a, what is the surface area of the cube?
3.

a) What is the area of triangle MQR?
b) What is the area of parallelogram MNPR?
4. The net for a triangular pyramid is shown to the right.

Each face of this pyramid is an equilateral triangle with a side length of 10.5 cm and a height of 13 cm .

What is the surface area of the triangular pyramid?

5. The dimensions of a rectangular prism are $12 \frac{1}{4} \mathrm{ft}$ by 10 ft by 5 ft . What is the volume of this rectangular prism in cubic feet?
6.


9 in
Find the area of the right triangle, in square centimeters.
7. Find the area of this isosceles trapezoid.


17 ft
8. Which of the following figures have an area of 22 square feet?
a)

b)

c)
6 ft

2 ft
9. The trapezoid below can be divided into three equal triangles.


If the area of the shaded triangle is $14 \mathrm{in}^{2}$, what is the area of the trapezoid?
10. Find the area of the figure shown to the right.
11. Find the area of the arrow.

12. What is the area of the shaded region?
a) $\frac{1}{2} A B$ square units
b) $\frac{1}{2} A C$ square units
c) $\frac{1}{2} A B C$ square units
d) $A B$ square units

13. Which of the following 2-dimensional nets of polygons can be folded to create a paper cube?
a)

b)

c)

14. Triangles $R$ and $S$ are congruent. If the area of the rectangle is 22 square inches, what is the area, in square inches, of the parallelogram?

15. What is the value of $2^{2}+1^{3} \times 3-1$ ?
16. Write a numerical expression that represents the sum of $n$ squared and 7, multiplied by seventeen.
17. What is the value of $y$ that makes the given equation true?
$y+34.1=52.94$
18. Select all expressions that equivalent to $8(2 \mathrm{k}+5 \mathrm{r})$
a) $16 \mathrm{k}+40 \mathrm{r}$
b) $54 \mathrm{k}+45 \mathrm{r}$
c) $5(8 \mathrm{k}+2 \mathrm{r})$
d) $4(4 \mathrm{k}+10 \mathrm{r})$
 represents the table below.

| Week (w) | Number of multiplication facts memorized <br> $(\mathrm{m})$ |
| :---: | :---: |
| 1 | 6 |
| 2 | 12 |
| 3 | 18 |

20. Stephanie paid $\$ 14$ dollars for 6 pastries. How many pastries could she buy for $\$ 7$ ?
21. Taylor is making a beaded necklace for her mom. She plans to use more than 5 red beads (r) and less than 22 blue beads (b) in the necklace. Write a pair of inequalities that models the possible quantities for each color.
22. The sixth graders at Baird Middle School are selling bags of popcorn and candy bars for a fundraiser. The ratio of the total amount of popcorn sold to the total amount of all snacks sold is $5: 12$. What is the ratio of total snacks sold to popcorn sold?
23. Which of the following solutions are represented correctly on their number line? Select two that apply.
a) The bag of cotton weighs less than 75 grams. The number line that represents this amount is:

b) Katie's dog weighs more than 9 pounds. The number line that represents this amount is:

c) Owen's suitcase weighs less than 10 kilograms. The number line that represents this amount is:

24. Owen's Donut Shoppe prices their donuts using a constant rate of $\$ 8$ for every dozen donuts. Which of the following prices matches this rate?
a) $\$ 18$ for 36 donuts
b) $\$ 24$ for 36 donuts
c) $\$ 32$ for 36 donuts
d) $\$ 48$ for 36 donuts
25. Which of the following expressions contains only 1 constant?
a) $18+t^{2}$
b) $6 x-x^{3}$
c) $5(\mathrm{~m}-1)$
d) $p(4-2)$
26. Crystal surveyed her classmates to see how many hours they usually sleep each night. The results are shown in the table.

| 7 | 8 | 4 | 6 | 7 | 7 | 9 | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | 8 | 8 | 10 | 9 | 7 | 6 | 8 |

Find the total number of people Crystal surveyed.
27. Sadie 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 Sadie recorded the rainfall?
28. The table below shows the prices, in dollars, of a large plain pizza at 9 different local pizza restaurants.

| $\$ 10.00$ | $\$ 9.50$ | $\$ 7.00$ |
| :--- | :--- | :--- |
| $\$ 5.50$ | $\$ 10.20$ | $\$ 9.00$ |
| $\$ 8.00$ | $\$ 8.50$ | $\$ 11.00$ |

What is the mean price, in dollars, of a large pizza at these restaurants?
29. Jenna is creating a budget, and she has made a table listing her account balances at some stores.

| Store | Account Balance |
| :---: | :---: |
| A | -32.28 |
| B | -28.86 |
| C | -28.99 |

Jenna also owes her parents $\$ 28.87$. Jenna claims that the amount she owes to her parents is lower than any of the account balances at the various stores. Which two account balances prove that Jenna's claim is false?
30. Which of the following numbers is/are located to the left of the number $\mathbf{- 1 7}$ on a number line? Select two that apply.
a) - $\mathbf{- 1 7 . 0 1}$
b) 0
c) -18
d) 20
e) -16.20

