

**FOURTH QUARTER PERIODICAL TEST**  
**MATH 6**  
**SY** \_\_\_\_\_

Name: \_\_\_\_\_  
 Grade and Section: \_\_\_\_\_

Score: \_\_\_\_\_  
 Date: \_\_\_\_\_

Choose the letter of the correct answer.

1. What is the relationship of the volume between a prism and a pyramid of the same dimensions?
  - A. the volume of the pyramid is  $\frac{2}{3}$  of the volume of the prism
  - B. the volume of the pyramid is  $\frac{3}{3}$  of the volume of the prism
  - C. the volume of the pyramid is  $\frac{1}{3}$  of the volume of the prism
  - D. the volume of the pyramid is  $\frac{3}{2}$  of the volume of the prism
2. The volume of a cone is \_\_\_\_\_ the volume of a cylinder if both are of the same dimensions.
  - A. double
  - B. thrice
  - C. twice
  - D. 4 times
3. How many cones can fill the whole sphere with the same dimension?.
  - A. 1
  - B. 2
  - C. 3
  - D. 4
4. If the volume of a cylinder is  $120\text{m}^3$ , what will be the volume of a cone with the same dimension?
  - A.  $180\text{m}^3$
  - B.  $60\text{m}^3$
  - C.  $40\text{m}^3$
  - D.  $30\text{m}^3$
5. What is the length of the edge of a cube if it has a volume of 27 cubic inches?
  - A. 9 in
  - B. 6 in
  - C. 3 in
  - D. 2 in
6. The length of each side of a cube is 10cm. What is the volume?
  - A.  $600\text{cm}^3$
  - B.  $400\text{cm}^3$
  - C.  $1000\text{cm}^3$
  - D.  $100\text{cm}^3$
7. Below is a rectangular plant box with given dimension. How many cubic meters of soil can it hold?

3.5 m

0.8m

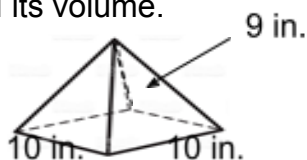
0.4m

- A.  $1.25\text{m}^3$
  - B.  $1.12\text{m}^3$
  - C.  $1.2\text{m}^3$
  - D.  $1.15\text{m}^3$

8. A rectangular swimming pool is 25 m by 16 m and has an average depth of 4 m. How many cubic meters of water will it take to fill the pool?

- A.  $1600\text{m}^3$
  - B.  $1400\text{m}^3$
  - C.  $1500\text{m}^3$
  - D.  $1700\text{m}^3$

9. Find its volume.



- A.  $400\text{in}^3$
  - B.  $500\text{in}^3$
  - C.  $600\text{in}^3$
  - D.  $300\text{in}^3$

10. A pyramid has a area of  $2.25\text{m}^2$  and has a height of 5 m. What is the volume of the pyramid?

- A.  $16\text{m}^3$
  - B.  $12.3\text{m}^3$
  - C.  $11.25\text{m}^3$
  - D.  $12.25\text{m}^3$

11. A cylindrical tank has a height of 1.5 m and a radius of 1.2 m. Find its volume.

- A.  $66.2\text{m}^3$
  - B.  $11.68\text{m}^3$
  - C.  $6.78\text{m}^3$
  - D.  $5.65\text{m}^3$

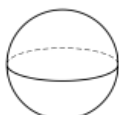
12. A cooking oil can has a radius of 5 cm and a height of 10 cm. What is the volume of the can?

- A.  $785\text{m}^3$
  - B.  $786\text{m}^3$
  - C.  $875\text{m}^3$
  - D.  $876\text{m}^3$

13. Find the volume of a cone whose base has a radius of 3 cm and whose height is 12 cm.

- A.  $113.04\text{cm}^3$
  - B.  $154.2\text{cm}^3$
  - C.  $339.12\text{cm}^3$
  - D.  $318.5\text{cm}^3$

14. What is the formula to be used to find the volume of the figure below?



- A.  $V = 2\pi r^2 + h2\pi r$
  - B.  $V = \frac{4}{3}\pi r^3$
  - C.  $V = \pi r^2 + \pi rL$
  - D.  $V = 2\pi r^2$

15. The diameter of a sphere is 2 cm. What is the volume if rounded to the nearest tenths?

- A.  $4.2\text{cm}^3$                       B.  $5.2\text{cm}^3$                       C.  $3.7\text{cm}^3$                       D.  $3.5\text{cm}^3$

16. The volume of a prism is  $96\text{ m}^3$ . To get the volume of a pyramid with the same dimension, what should be done?

- A. add by 3                      B. subtract by 3                      C. multiply by 3                      D. divide by 3

17. Electric consumption is measured in \_\_\_\_\_.

- A.  $\text{m}^3$                       B. kwh                      C.  $\text{m}^2$                       D. Kph

18. The water meter of Lizardo's family last month was 0001419. They consumed 35 cubic meter this month.

What is missing in the problem?

- A. present reading  
B. previous reading  
C. cubic meter consumed  
D. payment for the month

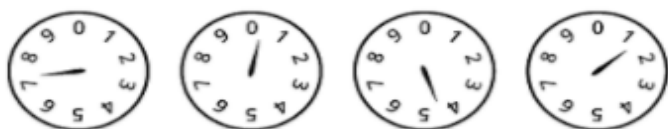
19. How will we determine the amount of water used in a month?

- A. Multiply the present reading by the previous reading  
B. Add the present and previous readings  
C. Get the quotient of the two readings  
D. Subtract the previous reading from the present reading

20. One cubic meter of water is equal to \_\_\_\_\_.

- A. 100 liters                      B. 10 000 liters                      C 1000 liters                      D. 10 liters

21. What is the reading of the meter?



- A. 8151                      B. 8041                      C. 7041                      D. 7051

22 to 26 Refer to the problem in the boxes.

On January 5, the water meter of a factory read 0801327. On February 5, the meter registered 0803098. How many cubic meters of water did the factory consume?

22. What is asked in the problem?

- A. present reading                      C. previous reading  
B. cubic meters consumed                      D. previous and present

23. What operation should be used to solve the problem?

- A. addition                      B. subtraction                      C. multiplication                      D. division

24. What is the answer?

- A.  $1971\text{ m}^3$                       B.  $1871\text{ m}^3$                       C.  $1771\text{ m}^3$                       D.  $1781\text{ m}^3$

The Cruz family consumed 208 kwh this month. The previous reading was 5172 kwh. What is the present reading?

25. What operation shall we use to solve the problem?

- A. addition                      B. subtraction                      C. multiplication                      D. division

26. What is the answer?

- A. 5280kwh                      B. 5380kwh                      C. 5480kwh                      D. 5580kwh

The score of pupils in math drill with 10 items are the following:  
8, 9, 10, 6, 10, 9, 10, 7, 9, 10, 7, 9, 8, 8, 5

27. How many had a perfect score?  
A. 3                      B. 4                      C. 5                      D. 1
28. What is the lowest score?  
A. 5                      B. 6                      C. 7                      D. 8

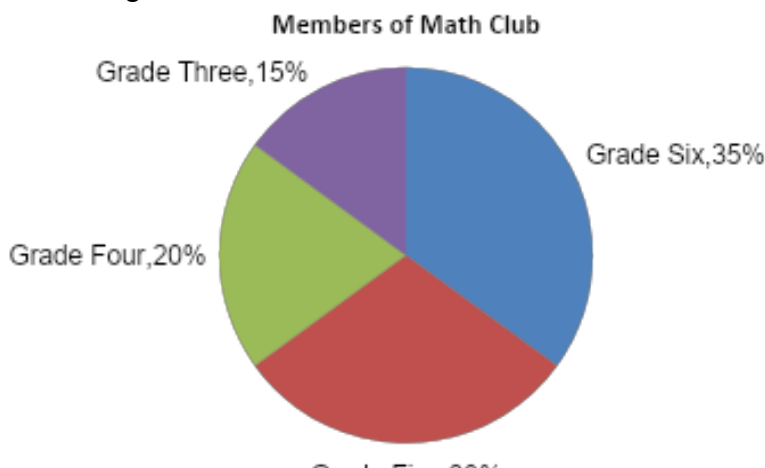
The following data shows the blood types for a group of 180 people.

Type A	18%
Type B	22%
Type AB	10%
Type O	50%

29. In constructing a pie graph based on the given data, how many degrees will be given to Blood type O?  
A. 90°                      B. 180°                      C. 100°                      D. 120°
30. How many degrees will be given to blood type AB?  
A. 65°                      B. 42°                      C. 80°                      D. 36°
31. Which has the most blood type?  
A. Type A                      B. Type B                      C. Type AB                      D. Type O

32 to 36. Refer to the graph.

There are 120 members in the Math Club in Maligaya Elementary School. The table shows the percent of members in each grade.



32. What grade level has the least number of members?  
A. Grade Three                      B. Grade Four                      C. Grade Five                      D. Grade Six
33. What percent of the student are in grade five?  
A. 35%                      B. 30%                      C. 15%                      D. 20%
34. How many members are there in Grade Four?  
A. 18                      B. 24                      C. 36                      D. 42
35. How many members are there in Grade Six?  
A. 18                      B. 24                      C. 36                      D. 42
36. What is the difference between the highest and least number of members?  
A. 24                      B. 120                      C. 60                      D. 42
37. Which weather forecasts that rain is likely to happen tomorrow?  
A. the probability of rain tomorrow is 50%  
B. rain is uncertain tomorrow  
C. 30% chance of rain tomorrow  
D. Ninety percent chance of rain tomorrow.
38. The chance that it will snow in Manila by December, is

- A. certain      B. likely to happen      C. most likely to happen      D. impossible to happen

39. In tossing a coin, the chance to have a Head (H) or a Tail (T) has a

- A. 50-50 probability      C. 30-20 probability  
B. 60-40 probability      D. zero probability

40. Pedro tossed a coin 10 times and the results were recorded in the table. Which table shows the correct recording?

A.

Head	5
Tail	11

B.

Head	3
Tail	7

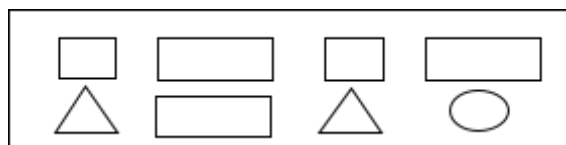
C.

Head	6
Tail	5

D.

Head	4
Tail	4

41. Jacob constructed the geometric figures inside the box. What will be the possibility of Jacob choosing the following 8 shapes?



- A. 2 triangles, 2 squares, 3 rectangles and 0 circles  
 B. 3 triangles, 3 circles, 2 rectangles and 1 circle  
 C. 1 circle, 3 rectangles, 2 squares and 2 triangles  
 D. 2 circle, 3 triangles, 1 squares and 2 rectangles

A jar contains 12 caramel, 7 mints and 16 chocolates.

42. What is the probability of selecting a mint, expressed as a fraction?

- A.  $\frac{1}{5}$       B.  $\frac{1}{2}$       C.  $\frac{1}{3}$       D.  $\frac{1}{4}$

Lizzie put 3 green blocks, 12 blue blocks, 2 yellow blocks and 1 orange block in a box. Ronald pulls out one block out of the box each time without looking.

43. The chance to pull out a black block is \_\_\_\_\_.

- A. unlikely to happen      C. 50-50 chance to happen  
B. most likely to happen      D. impossible to happen

44. The chance to pull out a blue block is \_\_\_\_\_.

- A. likely to happen      C. 50-50 chance to happen  
B. most likely to happen      D. impossible to happen

45. The chance to pull out an orange block is \_\_\_\_\_.

- A. unlikely to happen      C. 50-50 chance to happen  
B. most likely to happen      D. impossible to happen

46. If you roll a die, what is the chance of rolling a two?

- A. 2 out of 6      C. 1 out of 6  
B. 3 out of 6      D. 1 out of 3

47. Mr Jacob, the Grade 6 teacher, has been told to choose 4 learners from his class. He says his method for choosing learners is fair. He places the 28 girls' names in one box and the 24 boys' names in another box and draws 2 names out of each box. Do you think it's a fair method?

- A. Yes because he was able to select 4 learners randomly.  
 B. Yes because both boys and the girls were given equal chances  
 C. No, because girls had a bigger number  
 D. No. To be fair, the names of the boys and the girls should have been placed in one box only.

48. On a multiple choice test with four options A, B, C, D, what is the probability of guessing the correct answer?

- A. 20%      B. 25%      C. 30%      D. 35%

49. An employee of a toy shop checked 336 toys and found 14 of them defective. What is the experimental probability of choosing a defective toy?

- A. 1/8

B. 5/24

C. 1/12

D. 1/24
50. A meteorologist says that the probability of rain today is 35%. What is the probability that it will not rain?
- A. 25%

B. 55%

C. 65%

D. 75%

4<sup>th</sup> PERIODICAL TEST

MATHEMATICS 6

TABLE OF SPECIFICATIONS

OBJECTIVES	Easy		Average		Difficult		No. of Items	Item Placement
	Knowledge	Comprehension	Application	Analysis	Synthesis	Evaluation		
Determine the relationship of the volume between rectangular prism and pyramid		I					1	1
Determine the relationship of the volume between a cone, sphere, and cylinder		II					2	2,3
Finds the volume of cylinder, pyramid, cones and sphere						IIII-II	7	4,5,6 7,8,9,10
Solves routine and non-routine problems volume of solids	I					IIII	6	11,12,13 14,15,16
Reads and interprets electric meter readings	II						2	17,21
Reads and interprets water meter readings				I	I		2	19,20
Solves routine and non-routine problems involving electric and water consumption				III		III	6	18,22,23 24,25,26
Collect data on one or two variables using any source					II		2	27,28
Construct a pie graph based on the given set of data				II			2	29,30
Interprets data presented in a pie graph		III				III	6	31,32,33 34,35,36
Describe the meaning of probability such as 50% chance of rain and one in a million chance of winning				I			1	39
Quantifies the phrase ‘most likely to happen” and unlikely to happen”				IIII			5	37,37,43,44,45
Perform experiments and records outcomes					II		2	40,42
Makes listing and diagram of outcomes and tells the number of favorable outcomes and chances using these listing and diagrams					I		1	41
Make simple prediction of events based on the results of experiments				II			2	46,47
Solves routine and non-routine problems involving experiment and theoretical probability						I II	3	48,49,50
TOTAL							50	

KEY ANSWER:

1.C	11.C	21.C	31.D	41.C
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2.B	12.A	22.B	32.A	42.A
3.B	13.A	23.B	33.B	43.D
4.C	14.B	24.C	34.B	44.B
5.C	15D	25.A	35.D	45.A
6.C	16.D	26.B	36.A	46.C
7.B	17.B	27.B	37.D	47.D
8.A	18.A	28.A	38.D	48.B
9.D	19.D	29.B	39A	49.D
10. A	20.C	30.D	40.B	50.C