PRE-TEST IN MATHEMATICS 6

Name_____ **Score**_____
Teacher_____ **Date**_____

Direction: Read and solve the given problems carefully. Write the letter of your answer on the space provided before each number.

_____1. What is 1/5 + 3/5?
A. 2/5 B. 4/25 C. 4/10 D. 4/5

_____2. Add 2/4 and ¾.
A. 5/4 B. 1 ¼ C. 4/5 D. 1 2/4

_____3. Add ½ and 2/5.
A.3/5 B. 3/10 C. 3/7 D. 9/10

_____4. Subtract ¾ from 5/6.
A.1/12 B. 3/6 C. 1/2 D. 8/10

_____5. Subtract 7/8 and 3/8.
A. 4/8 B. ¼ C. ½ D. 10/8

_____ 6.When 8 is multiplied by 2/3, the product is _____.
A. 8 2/3 B. 5 1/3 C. 3 3/8 D. 2 1/3

_____7. What is 4/5 is multiplied by 9/10 ?
A. 30/50 B. 18/25 C. 37/50 D. 21/25

_____8. When 8 is divided by 1/3, the quotient is _____.
A. 24 B. 25 C. 26 D. 27

_____9. In 2/3 ÷ 6/7, the quotient will be _____
A. 7/8 B. 7/9 C. 7/10 D. 7/11

_____10. The sum of 6 + 0.413 + 0.173 is _____
A. 0.6586 B. 6.586 C. 6.865 D. 6.658

_____11. Subtract 0.9289 and 0.7493. The difference is
A. 0.2216 B. 0.1796 C. 1.6782 D. 0.0796

_____12. For her father's birthday, Cielo bought a gift worth P206.50. How much of her five hundred peso bill was left?
A. P293.50 B. P286.50 C. P274.50 D. P253.50

_____13. It means the comparison between two numbers
a. Ratio b. proportion c. decimal

_____14.It is the result of finding a certain percent of a number.
a. Rate b. base c. percentage

_____15.It is an equation stating that two ratios are equal.
a. Ratio b. proportion c. base

_____16.It is the element usually followed by the word percent of the sign %.
a. Rate b. base c. percentage

_____17. It is the other word/term for multiplicative inverse.
a. Proportion b. reciprocal d. fractio

_____18. There are 24 boys and 16 girls in Grade V-Camia. What is the ratio of girls to boys using fraction?

A. 24/16 B. 16/24 C. 16/40 D. 24/40

_____**19**. A recipe for pancakes uses 3 cups of flour and 2 cups of milk. What is the ratio of milk to flour?

A. 2:3 B. 3:2 C. 2:5 D. 5:2

_____20. Lei had ₱150. She spent ₱48 for spaghetti and Php12 for the drinks. What percent of her money was left?

A. 30% B. 50% C. 60% D. 40%

_____21. Kate has a 15% mistake in a 60-item test. How many mistakes does Kate have in the test?

A. 9 B. 12 C. 15 D. 20

_____22. Which of the following best describes the set of integers from –12 to –4?

A. {–12, –11, –10, –9, –8, –7, –6, –4, } C. {–12, –8, –6, –4, -2 , 0}

B. {–12, –10, –8, –6, –4} D. {–4, –5,-6,–7,–8,–9,–10,-11,-12}

_____23. The correct increasing order of integers of 18, -20, -30, 17, 20 is _____

A. -30, -20, 17, 20, 18 C. 20, 18, 17, -20, -30

B. -30, 20, 18, 17, 20 D. -30, -20, 17, 18, 20

_____24. Find the value of N to make 6^3 = N true.

A. 18 B. 216 C. 36 D. 261

_____25.Which solid figure has polygonal base and its faces are triangles?

A. Triangular prism B. Cube C. Cone D. Sphere

_____26.A _____ is a solid figure with a circular base and one vertex.

A. Cylinder B. Cone C. Square pyramid D. Sphere

____**27**.Which solid figure has triangular base, 6 edges, 3 triangular faces and 1 common vertex?

A. cone C. triangular prism

B. square pyramid D. triangular pyramid

_____28.Which words will complete the statement correctly?

_____ figure is two-dimensional with length and width while

_____ figure is three-dimensional with length, width and depth.

A. geometric, spatial C. solid, plane

B. plane, solid D. solid, spatial

_____29.Which of the following real object represent a triangular prism ?

A.  B.  C.  D. 

_____30. How many faces does a sphere have?

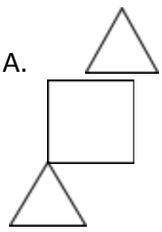
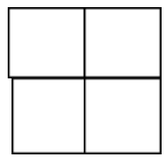
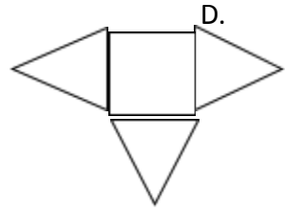
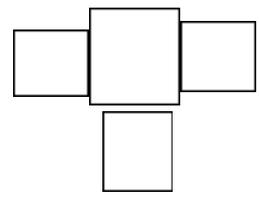
A. 0 B. 3 C.1 D. 2

_____31. A cube has _____ faces.

A. 8 B. 6 C. 10 D. 4

_____32.Which of the following will form a square pyramid?

A.  B.  C.  D. 

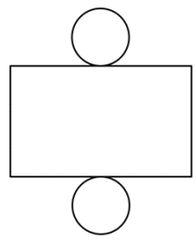
_____33. Which solid figure will be formed using the net?

A. cone

B. cylinder

C. pyramid

D. sphere



_____ 34.What is the missing term in the sequence 1, 3, 7, 15, _____?

A. 30 B. 31 C. 32 D. 33

._____35.What is the formula in finding the 5^{th} term in the sequence 1, 3, 7, 15?

A. n + 1 B. n + 2 C. 2n + 1 D. $n^2 + 1$

_____ 36. What is the 10^{th}term in the sequence 2, 5, 8, 11 . . .?

A. 29 B. 39 C. 49 D. 59

Direction: Match Column A with column B for the correct formula.

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Column A	**Column B**
____37. Volume of Rectangular prism	A. V= ∏r^2h/3
____38. Volume of rectangular pyramid	B. V = S^3
____39. Volume of cube.	C. V = 4∏r^3/3
____40. Volume of cylinder	D. V= lwh
____41. Volume of cone	E. V = ∏r^2h
____42. Volume of sphere	F. V = lwh/3

____43. Calculate the Volume of cylinder if r = 3 cm and h = 5 cm

A. V = 141.3 cm^3 B. V = 141.30 cm^2 C. V = 141.2 cm^3 D. V = 141.2 cm^2

_____44. What is the volume of a cylinder if the radius is 2 m and height is 6 m?

A. V = 75.36. m^2 B. V = 75.36 m^3 C. V = 75.44 m^2 D V = 75.44 m^3

_____45. A cylinder is 154 inches high and 3 inches in radius, find its volume.

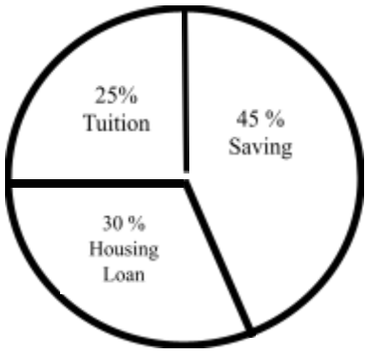
A. 4352.04 $inch^3$ B. 4352.04 $inch^2$ C. 4352.40 $inch^3$ D. 4352.40$inch^{2.}$

_____46. Find the volume of a pyramid with a rectangular base measuring 6 cm by 4 cm and height 10 cm.

A. 80cm B. 80 cm^3 C. 80cm^2 D. 80m^3

Answer the questions below using the graph

Family Bautista's Expenses



P20,000.00 monthly budget

_____ 47. What percent of the salary goes to family savings?_____

A. 25% B. 45% C. 30 % D. 0%

_____48. How much of the budget goes to tuition fee?_____

A. Php 9,000.00 B. Php 6,000.00 C.Php 5,000.00 D.Php5.00

_____49. How much is allotted to housing loan?_____

A. Php 6,000.00 B.Php 5,000.00 C.Php5.00 D.Php 9,000.00

_____ 50. Which has the greatest budget? _____

A. Tuition B. Housing loan C. Saving D. None

RAPU-RAPU EAST DISTRICT
CAROGCOG ELEMENTARY SCHOOL
Rapu-Rapu, Albay

DIAGNOSTIC TEST IN MATHEMATICS VI

TABLE OF SPECIFICATION

OBJECTIVES	NO. OF ITEMS	PLACEMENT	PERCENTAGE
1. Adds and subtracts simple fractions and mixed numbers without or with regrouping. M6NS-Ia-86	5	1-5	10%
2. Multiplies simple fractions and mixed fractions. M6NS-Ib-90.2	2	6-7	4%
3. Divides simple fractions and mixed fractions. M6NS-Ic-96.2	2	8-9	4%
4. Adds and subtracts decimals and mixed decimals through ten thousandths without or with regrouping. M6NS-Id-106.2	2	10-11	4%
5. Solves 1 or more steps routine and non-routine problems involving addition and/or subtraction of decimals and mixed decimals using appropriate problem solving strategies and tools. M6NS-Id-108.2	1	12	2%
Defines and illustrates the meaning of ratio and proportion using concrete or pictorial models M6NS-IIb-131	5	13-17	10%
Expresses one value as a fraction of another given their ratio and vice versa. M6NS-IIa-129	2	18-19	4%
Solves routine and non-routine problems involving finding the percentage , rate and base using appropriate strategies and tools. M6NS-IId-143	2	20-21	4%
Compares and arranges integers M6NS-IIh-154	2	22-23	4%
Gives the value of numbers expressed in exponential notation M6NS-IIf-147	1	24	2%
Visualizes and describes the different solid figures: cube, prism, pyramid, cylinder, cone, and sphere	3	25-27	6%
Differentiates solid figures from plane figures.	1	28	2%
Illustrates the different solid figures using various concrete and pictorial models.	1	29	2%
Identifies the faces of a solid figure.	2	30-31	4%
Identifies the nets of the following space figures: cube, prism, pyramid, cylinder, cone, and sphere using plane figures.	2	32-33	4%

Formulates the rule in finding the nth term using different strategies (looking for a pattern, guessing and checking, working backwards)	3	34-36	6%
Derives the formula for finding the volume of cylinders, pyramids, cones and spheres.	6	37-42	12%
Finds the volume of cylinders, pyramids, cones and spheres.	4	43-46	8%
Interpret data presented in a pie graph.	4	47-50	8%
TOTAL	**50 ITEMS**	**1-50**	**100%**

KEY TO CORRECT

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

44. B
45. A
46. B
47. B
48. C
49. A
50. C