Jathika Pasal Pawura - Sri jayawardanapura Zonal Education
First Term Test - 2019

Grade 8	MATHEMATICS	Time - 2 hrs

NAME - .....

Part I

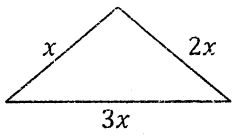
- Answer all the questions in the paper itself.

1) Write down the next two terms of the number pattern
   2 , 5 , 8 , 11 , 14

2) Simplify $2 + 4\,(15 \div 3)$

3) What is the additive inverse of (-3)

4) The perimeter of the triangle is 60 cm. Find the value of x



5) Simplify $\frac{1}{2} + \frac{1}{3} + \frac{1}{6}$

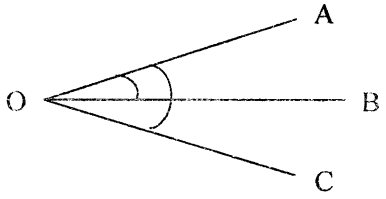
6) 

Calculate the value of a

7) Which type of solids
Satisfy Euler's relationship?

8) If $6^2 + 8^2 = x^2$, what is the suitable value for x

9) Simplify $3(x - 2) - 2(x - 3)$

10) 

Are $A\hat{O}B$ and $A\hat{O}C$ adjacent angles? Give resons for your answer

11) Find the value face of (-3) - (-4) - (-2) without using the number line.

12) The area of a face of a cube is 36 cm^2. Calculate the volume of the cube.

13) Calculate the 12^{th} term of the square number pattern starting from 1.

14) Find H.C.F of $8xy$ and $6y$.

15) Find the value of $2x - y$ when $x = 4$ and $y = 3$

16) Simplify $\frac{(-3)\times(-8)}{(-6)}$

17) Complement angle of 10^0 =
Supplement angle of 10^0 =

18) Simplify as much as possible
$9x + 8y - 5 - 7x - 4y$

19) Fill in the blanks appropriately
$-4x + 12 = 4(\square + \square)$

20) Name two platonic soilds.

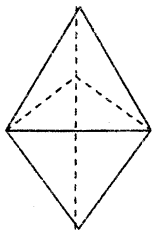
$(M = 2 \times 20)$

Part II

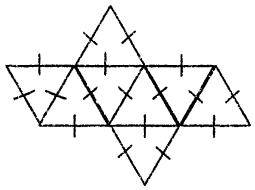
- Answer the first question and four other questions in a separate paper.

1) a) Write down the three main characteristics of a platonic solid. (M 03)

b) Explain why the solid given below is not a platonic solid. (M 01)



c) Given below is a net of a platonic Solid.



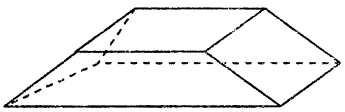
i. What is the name of the platonic solid? (M 01)

ii. Write down the number of faces, vertices and edges of it. (M 03)

iii. What is the shap of it's face? (M 01)

iv. A student made the solid using the above net. He is going to paste a tape along all the edges of it. If the length of an edge is 10 cm how much of tape does he require? (M 03)

d) Show that the solid given below satisfies the Euler's relationship. (M 04)



2) i. What are the digits that can be in the units place of a perfect square? (M 02)

ii. Write 324 as a product of prime numbers. (M 01)

Hence find $\sqrt{324}$ (M 02)

iii. Find $\sqrt{2 \times 3 \times 2 \times 3}$ (M 02)

iv. Find $\sqrt{361}$ by observation. (M 04)

3) a) Simplify

hour's	minutes		day's	hours.
4	10		9	12
+ 5	50		2	13

(*M* 2 × 2)

b) Write down 12.30 midnight in international standard form. (*M* 2)

c) A bus leaves Colombo at 10.45 a.m. and reaches Anuradhapura at 4.15 p.m.

i. Write 10.45 a.m. in international standard form (*M* 1)

ii. Write 4.15 p.m. in international standard form (*M* 1)

iii. Calculate the time taken for the journey. (*M* 2)

iv. The bus leaves from Anuradhapura at 10.45 p.m. What time will the bus reach Colombo. Write the answer in 12 hour clock. (*M* 1)

4) i. Separate the number given below into periods and name them.

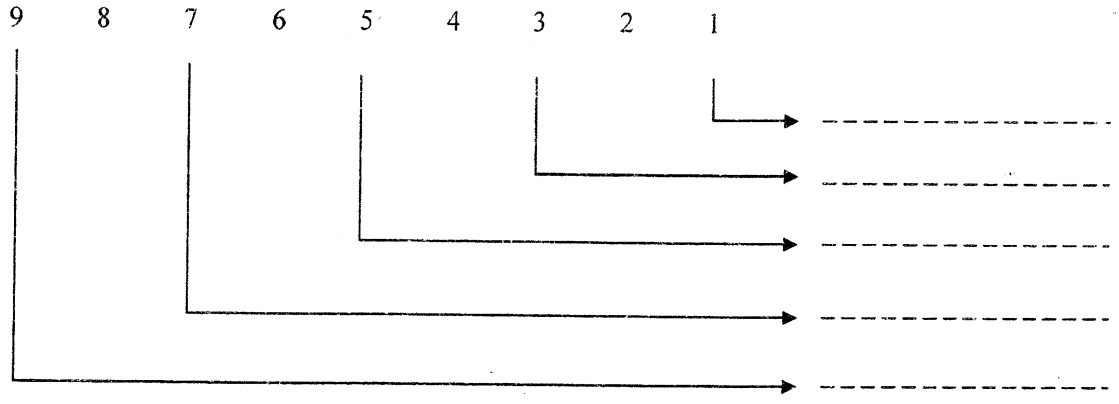
843400501072

.....	.....	.....	.....

(Copy this to your answer sheet) (*M* 4)

ii. Write down the values represented by the digits shown by arrows.

(Copy this to your answer sheet)



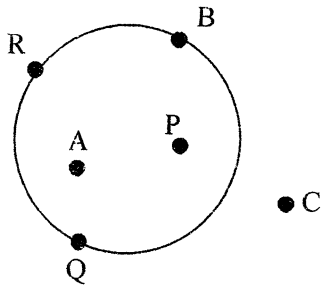
(*M* 5)

5) a) What are the

i. Points on the circle

ii. Points inside the circle

iii. Points outside the circle



(*M* 2 × 3)

b) Draw a <u>beautiful</u> circular design (Use the pencil) (*M* 5)

6) a) Explain how we can estimation to calculate (rough value) the number of words in an essay. (*M* 2)

b) Round off to the nearest multiple of 10

i. 31

ii. 99

iii. 85

iv. 102

v. 50

c) The number of mangoes in a bag is rounded of to the nearest multiple of 10. The answer was 50.

i. What can be the least number of mangoes? (*M* 1)

ii. What can be the most number of mangoes? (*M* 1)

iii. One mango was added to the bag. The total number of mangoes was rounded off as earlier. The answer was 60. How many mangoes was there at the beginning. (*M* 2)

7) a) Draw (i) An acute angle (ii) A right angel

(iii) An obtuse angle (iv) A reflex angle (*M* 1 × 4)

b) Name (i) An instrument to find direction (*M* 1)

(ii) An instrument to find the horizontal (*M* 1)

(iii) An instrument to find the vericle (*M* 1)

c) How many horizontal edges are there when a cuboids is placed on a horizontal table. (*M* 2)

(d) How many vertical edges re there when cube is placed on a horizontal table (*M* 2)