P6 MATHEMATICS MOCK

Instructions

1. Answer all questions in this paper.
2. Read each question carefully before answering it.
3. Answer all questions in the space provided on this question paper.
4. Show your working clearly. Marks will be given for showing steps.

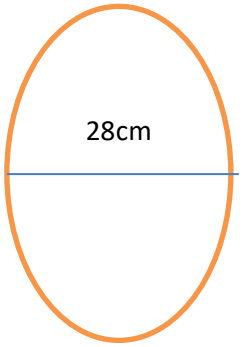
All rough work must be done in the space under each question.

5. You must use a blue or black pen.
6. You are not allowed to use a calculator.

Do rough work below each question	Show the working steps and final answer in this column

1. Write the following number in words. 729 872 604 **(2marks)**	
2. i)Write the place value of digit 6 in the number **(1mark)** 4567891 ii) Write the value of 7 in the above number. **(1mark)**	
3. i) Round off 86948 to the nearest thousands.**(1mark)** ii) Round off 1140038 to the nearest million. **(1mark)**	

4. Workout without : (**2marks**) $2\frac{1}{2} - \frac{3}{4} =$	
5. The actual length of a path is 20m. It is drawn using a line 5cm long. Find the scale. **(2marks)**	
6. Workout: 3.609 : 0.03 = **(2marks)**	

$\pi = \frac{22}{7}$ 7. Find the circumference of the circle below. **(2marks)**  	
8. The sum of two numbers is 36 and their quotient is 8. Find the two numbers. **(2marks)**	
9. Decrease 8000 by 14% **(2marks)**	

10. A cube has a total surface area of 96 cm^2. Find the volume of the cube. **(2marks)**	
11. Share 38400Frw between Linda and Jane in the ratio of 5:7 respectively. (**2marks)**	
12. Calculate the percentage loss for an item bought at 2000Frw and sold at a price of 1850Frw. (**2marks**)	

13. Find the two missing numbers in the sequence below: **(2marks)** 2; 5 ;11; 23 ; _____ ; _____	
14. The length of a rectangular piece of land is 60 m by 48m. Poles were fixed at intervals of 2m to fence it. a) What is the distance round the land? **(2marks)** b)How many poles were used to fence the land?	

15. Test whether 458716 is divisible by 6. (**2marks**)		
16. Find the numerical value of $4x^2 - 4x + 3$ if x= 3. (**2marks)**		
17.A regular decagon of 12 cm side has apothem of 18cm. Calculate its area. (**2marks)**		
18. Increase 900 litres in the ratio of 3:2 (**2marks)**		

19. work out: 18hr 35 min – 4hr 45 min 48 sec= ……hr ……min …..sec (**2marks)**	
20. Find the number whose square root is 45. (**2marks**)	
21.The interior angle of a regular polygon is 160^0. Find the number of sides. (**2marks**)	
22. Evaluate $17^2 + 4^4$ = (**2marks**)	

23. Solve the following: **(2marks)** $10^4 : 10^x = 10^2$ $4^5 \times 4^x = 4^2$	
24. Find the Greatest Common Factor (GCF) of 50; 75 and 90. **(2marks)**	
25.Uwacu's salary was increased from 50,000Frw to 60,000Frw. Calculate the percentage of increase. (**2marks**)	

26. A car takes 6hrs to cover a journey at 70km/hr. It takes only 4 hrs to return through the same distance. Calculate the average speed. **(3marks)**		
27. The distance round a circular face of a cylinder is 88cm and the height of the cylinder is 20 cm. Calculate the volume and the surface area. (**3marks**)		

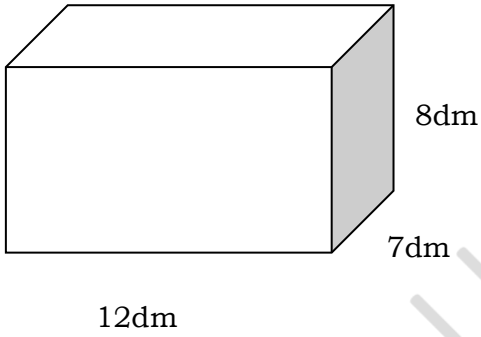
28. Charles mixed 30 litres of orange juice which cost 1,000Frw per litre with 20 litres of passion fruit juice which cost 1,200Frw per litre. Calculate the average price of each litre of juice. **(3marks)**	
29. Three taxis leave the park at intervals of 15,20 and 25 minutes. After how long will the taxis leave the park at the same time? (**3marks)**	

30. Uwera had land. She gave $\frac{}{25}$ of it to her son, Kwizera. She also gave $\frac{3}{8}$ of the land to her daughter, Cissy.

a)What fraction of the land did she remain with?

b) If Uwera remained with 18 hectares, calculate the hectares she had originally.

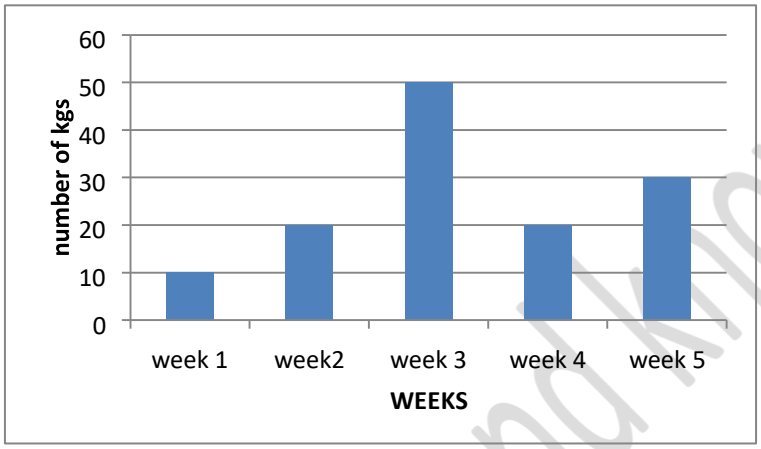
31. i)Find the volume and the total surface area of this cuboids. **/6marks**



ii) How many vertices do the above cuboids have?

/1mark

32. Study the bar graph and answer the questions that follow: Beans in kg sold in 5 weeks.



a) In which weeks did the shopkeeper sell the same quantities of beans? (**1mark**)

b)In which week did the shopkeeper sell the highest quantity of beans? (**1mark**)

c) Find the total kilogram of beans in the 5 weeks. (2**marks**)

d) If each kg of beans costs 700 Frw, how much did the shopkeeper get from the sale of beans in the five weeks?

(2**marks**)

e) In which week did the shopkeeper sell the least quantity of beans? (**1mark**)

33. The diagonals of a rhombus are 10cm and 24cm.

a) Calculate the area of the rhombus.

(**2marks**)

b)Calculate the perimeter of the rhombus

(**3marks**)

c) The simple interest on capital of 800,000Frw after 3months is 12000frw. Find the interest rate per year. (**2marks**)

34. A and B are two towns 170 km apart. A bus leaves town A for town B at 8:00 am travelling at 56km/hr. A car leaves town B for town A at 8:00am travelling at 80km/hr.

a)At what distance from town A to town B do the two vehicles meet? (**3marks**)

b)Find the time two vehicles meet. (**2marks**)

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c)Simplify completely: 3(m-2n)-2(m-4n)

(**2marks**)

35.i)The information shows two types of beans and their costs per kilogram./**5marks**

Type	QUANTITY	COST PER KG
A	300kg	300Frw
B	X kg	400Frw

What is the value of x which would make the cost of one kg of the mixture 340Frw/kg?

ii) Find the number of sides of regular polygon whose sum of interior angle is 1260^0. /**2marks**

ALL THE BEST!!!