



DIVINE EDUCATION CENTRE
PRE-PRIMARY LEAVING EXAMINATION

2022

MATHEMATICS (ITEM 4 of 4)

Time allowed: 2 hours 30 minutes

Random No.						Personal No.		

Candidate's name:

Candidate's Signature:

District ID:

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Read the following instructions carefully:

1. Do not write your **school** or **district name** anywhere on this paper.
2. This paper has two sections **A** and **B**. Section **A** has **20 questions** and section **B** has **12 questions**. This paper has **14 pages** printed altogether.
3. Answer **all** questions. All the working for both sections **A** and **B** must be shown in the spaces provided.
4. **All** working must be done using a **blue** or **black** ball point pen or ink. Any work done in pencil other than graphs and diagrams will **NOT** be marked.
5. **No calculators** are allowed in the examination room.
6. Unnecessary **changes** in your work and handwriting that cannot be easily read may lead to loss of marks.
7. Do not fill anything in the table indicated **"For examiners' use only"** and the boxes inside the question paper.

FOR EXAMINERS'		
USE ONLY		
Qn. No.	MARKS	EXR'S No.
1- 5		
6 -10		
11- 15		
16 - 20		
21 - 22		
23 - 24		
25 - 26		
27 - 28		
29 - 30		
31 - 32		
TOTAL		

SECTION A: 40 MARKS

Answer **all** questions in this section

Questions **1** to **20** carry two marks each

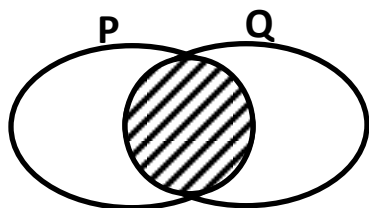
1. Work out: $55 \div 5$

2. Write “Fourteen thousand forty” in figures.

3. Solve the equation: $3w - (w - 1) = 11$

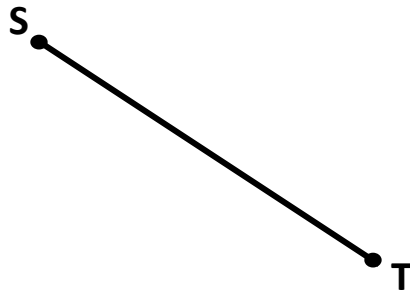
4. Work out: $\frac{4}{5} - \frac{4}{15}$

5. Describe the un shaded region in the venn diagram below.



6. Solve the inequality: $k - 3 < 2$

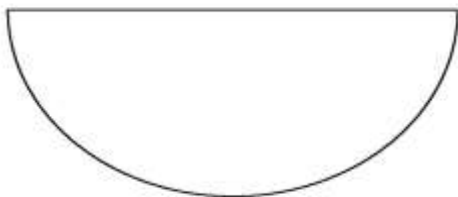
7. Using a pair of compasses, ruler and a pencil only, bisect the line segment ST below.



8. A trader bought a dress at sh.47,000 and later sold it making a profit of sh.13,000. How much did he sell the dress?

9. The total distance round the figure below is 54 dm.

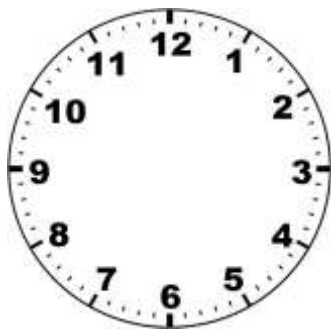
Find its diameter.



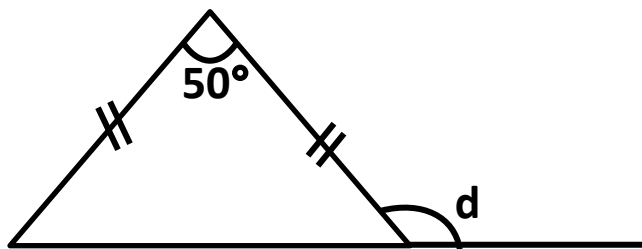
10. Simon bought 3 boxes with $\frac{1}{2}$ dozen of 96 pages of exercise books.
He later sold off one dozen of books.
How many pages did he remain with?



11. Mr .Ssegona arrived for the meeting at 8:55a.m. If he arrived 15 minutes late for the meeting.
Show the time the meeting started on the clock face below.



12. Find the value of d in the figure below in degrees.



13. A cyclist covered a certain distance at 60 km for every one hour in 45 minutes. Calculate the distance covered by the cyclist.

14. The base area of a cuboid is 1200 cm^2 . If its capacity is 60 litres. Find its height.

15. Given that $5k - 15^\circ$ and 50° are complementary angles, find the value of k in degrees.



16. The table below shows the marks scored by 15 pupils in a certain district mock. Study it carefully and use it to answer the question that follows.

Number of pupils	3	4	w	2
Marks scored	45	80	60	50

How many pupils scored 60 marks?

17. A minute hand is 14 cm long. It moved for 45 minutes. What distance did it remain with to make a complete revolution?

18. Najjuuko borrowed a certain amount of money from a saving group at the rate of 8% p.a for 9 months.
If the money yielded a simple interest of sh.24,000 after 9 months.
Calculate the money Najjuuko borrowed from the saving group.
19. The direction of town W from town K is S20°E.
Find the bearing of town K from town W.
20. The length and width of a rectangular piece of cloth is in the ratio of 3:2 respectively. If the area of the cloth is 54 square metres.
Find the total distance round the cloth.



SECTION B: 60MARKS

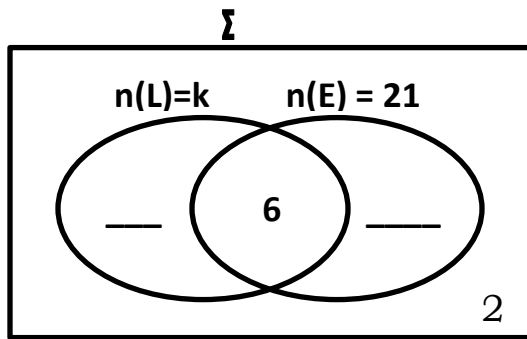
Answer **all** the questions in this section

Marks for each question are indicated in the brackets

21. In a class, 21 pupils speak English(E), 6 pupils speak both Luganda and English. The number of pupils who speak English only is eight less than those who speak Luganda(L) and 2 pupils do not speak any of the two languages.

(a) Use the given information to complete the venn diagram below.

(2marks)



- (b) How many pupils speak Luganda only?

(3marks)

22. The cash price of a new bicycle is sh.1,200,000 and the instalment price of the same bicycle is sh.400,000 per month for 5 months.
If Odong bought the bicycle in instalment, how much more money did he pay per month than buying it on cash price?

(4marks)



23. Jennifer went for shopping with sh.30,000 and bought the following items.

Items	Quantity	Unit cost	Total cost
Beans kg	Sh.3500 per kg	Sh.10500
Salt	$1\frac{1}{2}$ kg	Sh.1500 @ kg	Sh.....
Meat	500 g	Sh..... @ kg	Sh.7500
Total Expenditure			Sh.....

a) Complete the table above.

(4marks)

b)How much money did she remain with?

(2marks)

24. Musa drove from Kampala to Mpigi at a steady speed of 90km/h.
He immediately drove back to Kampala at a steady speed of 60km/h
with out resting.

The total time for the whole journey was 5 hours.

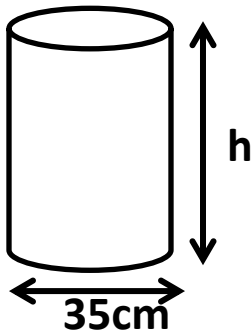
a)Calculate the distance between Kampala and Mpigi. **(3marks)**

b)How long did he take on his return journey?

(2marks)



25. Below is a metallic hollow cylindrical water tank whose volume is $38,500 \text{ cm}^3$.



a)Find the height of the tank. **(2marks)**

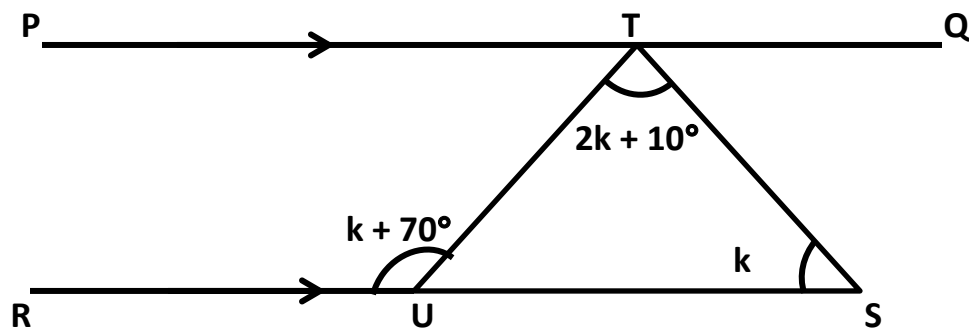
- b)If the curved face of the tank is cut out to form a rectangular sheet such that the height becomes the width, how many circular plates of diameter 7cm can be cut from the curved face?
(3marks)

26. a) Given that $m=0$ and $n=1$. Evaluate $9^n + 5^m$ **(2marks)**

b) Betty is a third as old as her mother. The difference between the mother's age and Betty is 24. How old is the daughter? **(4marks)**



27. In the figure below line PQ is parallel to line RS.
Study the figure below and use it to answer the questions that follow.



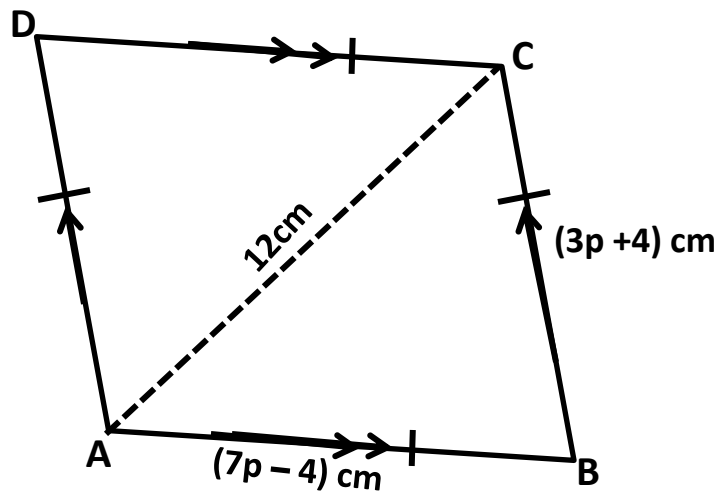
- a) Find the value of k in degrees. **(2marks)**

- b) Calculate the size of angle UTP. **(2marks)**

28. Tom and Juma started collecting mangoes.
 Tom is having 4 more mangoes than Juma now.
 After collecting 7 mangoes each, the number of mangoes collected will be in the ratio of 3:2 respectively.
 How many mangoes will each have collected by then ? **(4marks)**



29. Study the figure ABCD below carefully and use it to answer the question that follows.



Find the area of the figure ABCD above.

(6marks)

30. Two children Joshua and Aaron were asked to fill a water tank. Joshua alone took 4 minutes to fill the tank and Aaron alone took 8 minutes to fill the same tank. If Joshua and Aaron started filling the same tank at the same time while working at their respective pace.
- a) What fraction of the tank did they fill if they both worked for two minutes only? **(2marks)**

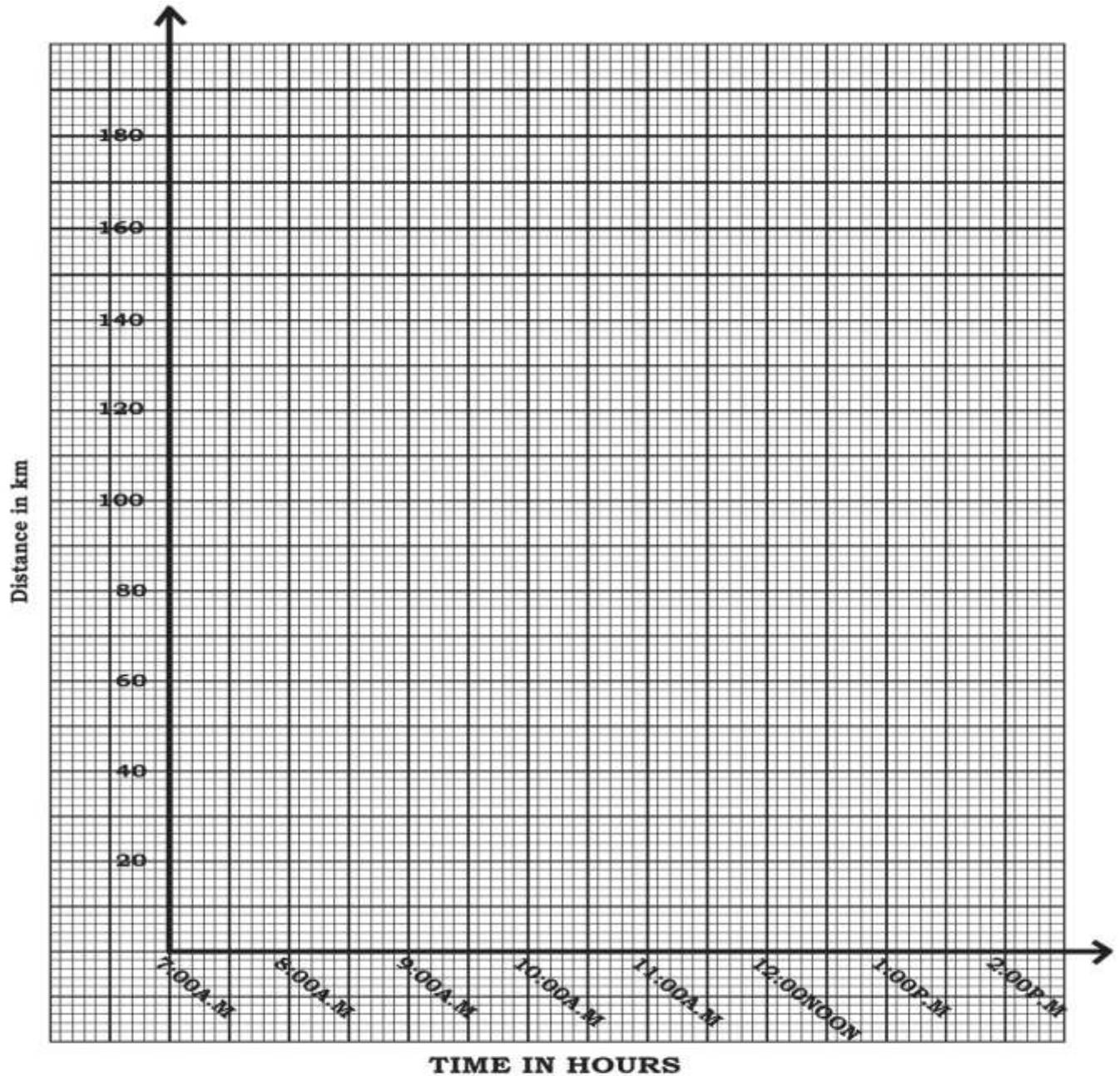
b) If the remaining part of the tank was 20 litres, calculate the capacity of the tank. **(3marks)**



31. Using a ruler and a pair of compasses only,
- a) construct a quadrilateral JKLM where line JK = 7cm, line KL=JM=5.8cm and angle JKL = angle KJM=75° **(4marks)**

b) Measure the length ML= cm. **(1mark)**

32. A motorist started his 180 km journey from town A to C at 7:30a.m. He drove at a speed of 40 km/h for 2 hours. He rested at town B for 30 minutes. He then continued to town C using the same speed to cover the remaining journey.
- a) Use the given information to show the motorist's journey on the graph below. **(3marks)**



b) Calculate the motorist's average speed for the whole journey.

(2marks)

END

