



JACARANDAS JUNIOR SCHOOL
PRIMARY SEVEN PRE – PLE REGISTRATION SET
2024
MATHEMATICS

Time Allowed: 2 hours and 30 minutes

Index No.						Personal No.		

Pupil's Name:

Pupil's Signature:

School Name:

District Name:

Read the following instructions carefully:

1. Do not forget to write your **school** or **district name** on the paper
2. This paper has two sections: **A** and **B**. section **A** has **20** questions and section **B** has **12** questions. The paper has **12** printed pages.
3. Answer **all** questions. **All** working for both section **A** and **B** must be shown in the spaces provided.
4. **All** answers must be written using a **blue** or **black** ball point pen or ink. Any work written in pencil will **not** be marked.
5. Unnecessary **changes** in your work and handwriting that cannot be read easily may lead to **loss of marks**.
6. Do not fill anything in the table indicated: "**FOR EXAMINERS' USE ONLY**" and boxes inside the question paper.

FOR EXAMINERS' USE ONLY		
QN. NO.	MARKS	EXR'S NO.
1 – 5		
6 – 10		
16 – 20		
21 – 22		
23 – 24		
25 – 26		
27 – 28		
29 – 30		
31 – 32		
TOTAL		

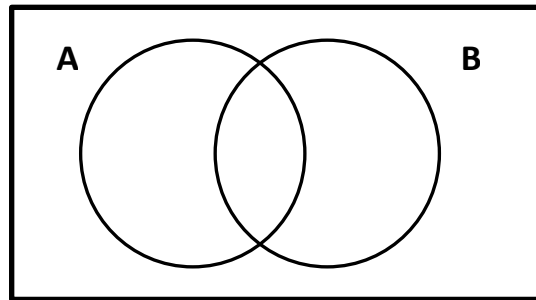
SECTION A: 40 MARKS

Answer **all** questions in this section

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

1. Giving your answer in Hindu – Arabic numerals, find the sum of V and IV.

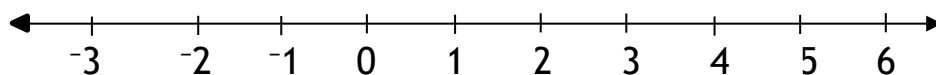
2. On the Venn diagram below, shade the complement of set $(A - B)$



3. In the space below, using a ruler, protractor and a pencil, draw the complementary angle of 30° .
4. Write an algebraic phrase for the expression; $2(x+y)$.
5. Write the test divisibility of 6.



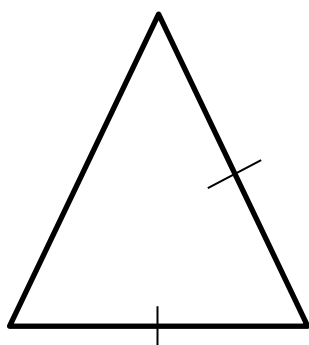
6. On the number line below, draw an arrow showing -5 .



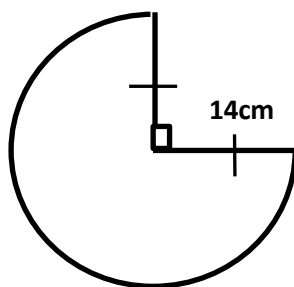
7. Given that 55 girls were represented by 11 pictos, find the scale used.

8. Workout; $1101_{\text{two}} - 111_{\text{two}}$

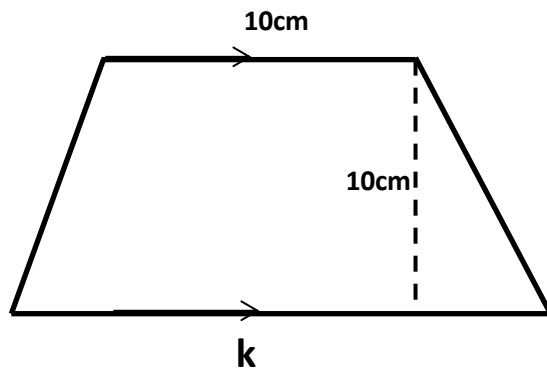
9. The figure below is a triangle. How many lines of symmetry does it have?



10. Find the length of the curved part in the figure below. (Use $\pi = \frac{22}{7}$)

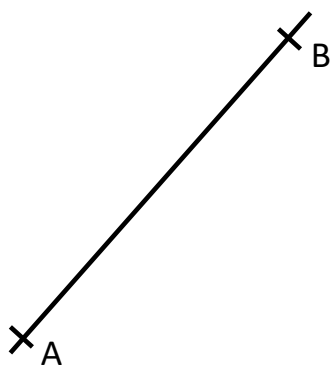


11. Given that the area of the figure below is 120cm^2 . Use it to find the value of k .



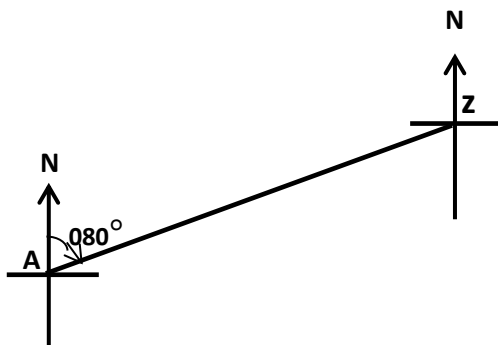
12. The temperature at the peak of a mountain is -18°C and at the bottom is 5°C . find the difference between the two places.

13. Using a pencil, ruler and a pair of compasses only, draw a perpendicular bisector to meet line AB at X.

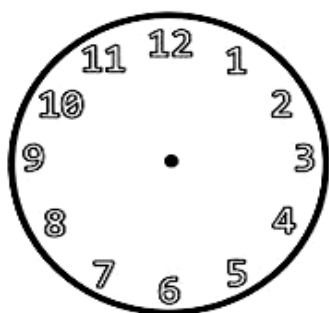


14. Find the square root of $2\frac{14}{25}$

15. Using the diagram below, find the bearing of town A from town Z.



16. On the clock face below, show a quarter to mid-day.



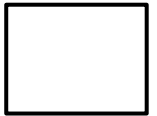
17. Increase 1200 in the ratio 3:5.

18. Which number has been expanded to give; $(3 \times 5^2) + (4 \times 5^0) + (2 \times 5^1)$?
(Give your answer in decimal base)

Turn Over

19. Find the biggest number of children that can completely share 36 or 60 sweets without leaving a remainder.

20. Find the value of X in, $2^x \div 2^2 = 4$.



SECTION B: 60 MARKS

Answer **all** questions in this section

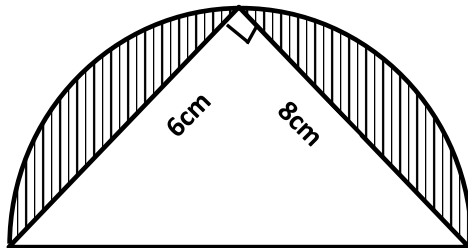
Marks for each question are indicated in brackets

21. The median of four consecutive odd numbers is 20. Find their sum.

(4marks)

22. (a) Opio made a circular dough of radius 14cm. His boss Ogwang told him to double its radius and makes it bigger. Find the distance around the new dough. (Take $\pi = 3\frac{1}{7}$) **(3marks)**

- (b) Find the area of the shaded part in the figure below. (Take $\pi = 3.14$) **(3marks)**



23. (a) Using a ruler, pencil and a pair of compasses only, construct a triangle PQR with QR = 6cm, $\angle PQR = 75^\circ$ and $\angle QPR = 60^\circ$. **(4marks)**

- (b) Measure the length of PQ. **(1mark)**

24. Kaka bought the items in the table below from a shop.

(a) Complete the table.

(4marks)

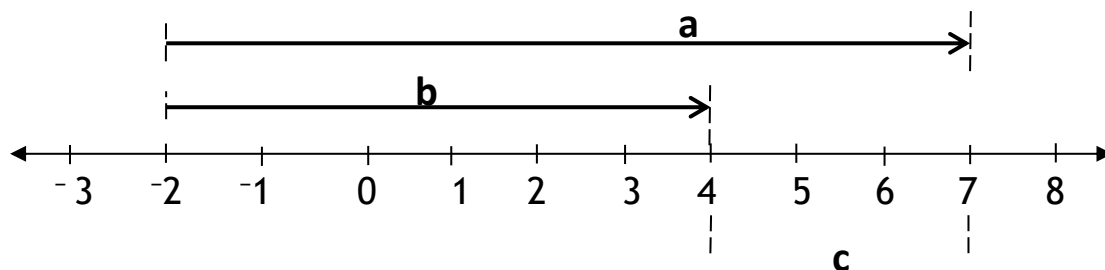
Item	Quantity	Price	Amount
Soap	_____ bars	sh. 4,500	sh. 13,500
Bread	2 loaves	sh. _____	sh. 11,000
Salt	2½kg	sh. 2000	sh. _____
Total expenditure			sh. _____

(b) If Kaka paid sh. 26550, what was his percentage discount?

(2marks)



25. Study the number line below and answer the questions that follow.



(a) Write the integers represented by arrows **a** and **b**. (1mark each)

a = _____

b = _____

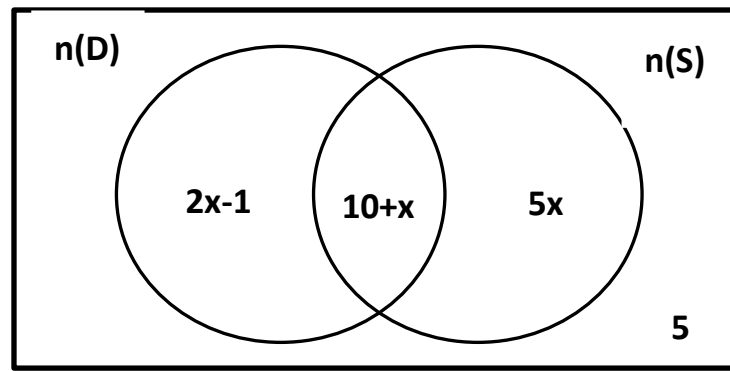
(b) Complete the number line by drawing arrow **C** correctly.

(1mark)

(c) Write a mathematical sentence for the above number line.

(1mark)

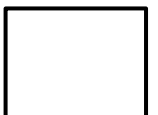
26. The Venn diagram below shows the number of candidates who participated in the **debate (D)** and **speech championships (S)**. Use it to answer the questions that follow.



- (a) If 8 candidates never participated in the speech championships, find the value of x . (3marks)

- (b) How many candidates are in the whole class?

(2marks)



Turn Over

27. (a) Solve; $(3x - 4) - (x + 6) = 0$

(2marks)

- (b) 3 girls shared a third of the cake equally and the boys shared the rest of it. If each boy got a sixth of the cake, how many children shared the cake?

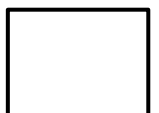
(3marks)

28. (a) Express 0.5454 As a common fraction.

(2marks)

(b) Simplify; $\frac{1.28 - 0.56}{0.08 + 0.28}$

(3marks)



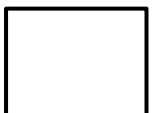
29. Three children Jolly, Joy and Jotham shared a certain amount of money in the ratio of 3:4:7 respectively. If Jotham received sh. 120,000 more than Jolly.

(a) How much money was shared altogether? **(3marks)**

(b) How much more money did Joy receive than Jolly? **(2marks)**

30. At Jacarandas Junior School, there are two bells, one for lower primary and the other for upper primary which rings at intervals of 30 minutes and 40 minutes respectively to change lessons. If the two bells ring together at 11:00am. At what time will they ring together again?

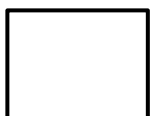
(5marks)



31. The table below shows marks scored by candidates at Jacarandas Junior School in mathematics.

Marks scored	70	85	80	95	65
No. of pupils	4	3	3	2	2

- (a) How many pupils are in the class? (1mark)
- (b) Calculate the range in their marks. (1mark)
- (c) Find the mean score for candidates who scored above 80 marks. (3marks)
32. The sum of interior angles of a regular polygon is 900° . Name the polygon. (4marks)



END