1. Divide 8 by 2.

2. Write 48,914 in words.

3. Work out: $5x = 4 \pmod 9$

4. Draw a Venn diagram to show $M \cap K = K$

5. Find the next number in the sequence .
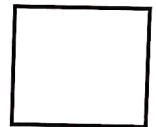
   8, 9, 12, 18, 28, _____

6. Given that the height of a boy is 190cm . Express the boy's height as metres.

7. Construct a pair of parallel lines of 4cm apart.
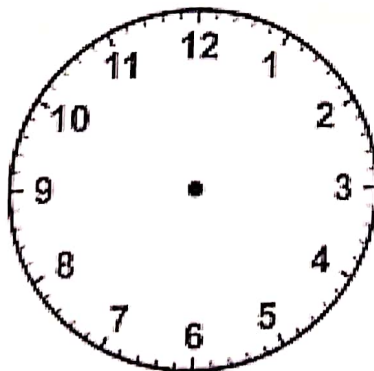
8. Simplify: $3\frac{1}{3} - 1\frac{4}{5}$

9. Given that ⌂⌂ represent 14 huts, draw pictures to represent 35 huts.
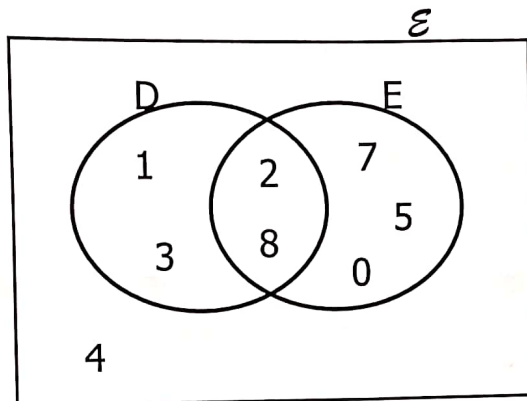
10. Simplify: $(4r + 6) - (5r - 4)$

☐

11. Given that $31_{five} = 1d1_{three}$, find the value of d.

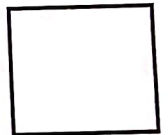12. Show twenty-five minutes to two O'clock on the clock face below.

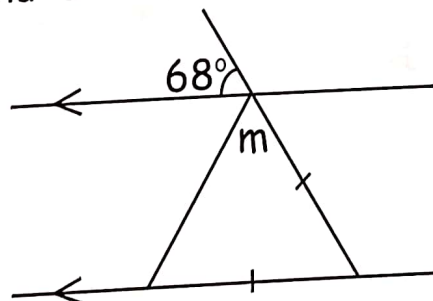13. Given the Venn diagram below, use it to find $n(D \cap E)^c$.

14. Simplify: $^-8 - {}^+8$

15. Write 735·83 in expanded form using powers.

16. Find the value of m in the figure below.

17.	How many 300ml bottles can fill a 12 litre container ?

18.	Rommy banked five thousand shilling bank notes numbered consecutively from KD832119 to KD832168 .
How much money did he bank ?

19.	Solve:	$\dfrac{2r}{3} - 8 = 0$

20.	A police vehicle was the 17th from one side and the 28th from the other side of a fleet of vehicles in a jam. How many vehicles were caught in the jam ?

SECTION B: 60 MARKS
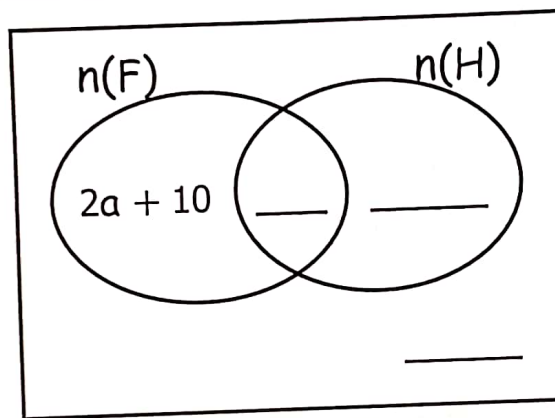
*Answer **all** questions in this section.*

Marks for each question are indicated in brackets.

21. In a group of tourists, $4a - 10$ love hunting (H) only as a sport, $2a + 10$ love fishing (F) only as a sport, $2a$ love both sports while $a + 8$ do not love any of the two sports.

(a) Complete the Venn diagram below.   (3 marks)

(b) If the number of those who hate the two sports is equal to the number of those who love both sports, find the value of a.
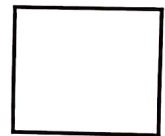   (2 marks)

22(a) Work out: $\dfrac{46\cdot76 - 7\cdot8}{0\cdot5 - 2\cdot39 + 3\cdot89}$ (3 marks)

(b) Express $\dfrac{3}{4}$ as a decimal. (2 marks)

23. The table below shows the buying and selling rates of foreign currencies on a certain day in Stanbic bank.

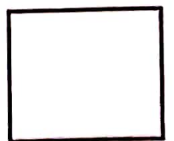| Currency	Buying rate	Selling rate
K.sh.	U.sh. 30	U.sh. 35
US dollar ($)	U.sh. 3695	U.sh. 3700
Rwanda Frac	U.sh. 1·5	U.sh. 2·0

(a) A donor supported a certain orphanage with US$ 7,850. How much money in Uganda shillings did the orphanage receive? (2 marks)

(b) A businessman from Kenya wished to go shopping in Rwanda. If he had K.sh. 650,000 , how many Rwanda Francs did he get after exchanging ? (3 marks)

24(a) Bwire is 14 years older than Mongo. In eight years' time, Mongo's age will be half Bwire's age. How old is Bwire now ? (3 marks)

(b) Given that $c = a^2$, find the value of a if $c = 36$. (2 marks)

25(a) Using a pair of compasses, a ruler and a sharp pencil, construct a quadrilateral VWXY where $\overline{WX}$ = 8cm , $\angle$WXY = 120⁰ and $\overline{VW}$ = 4·5cm . Drop a perpendicular line from point V to meet WX at R . (5 marks)

(b) Measure $\overline{VR}$ . ... (1 mark)

26. Complete the table below given that $y = 2x - 1$. (5 marks)

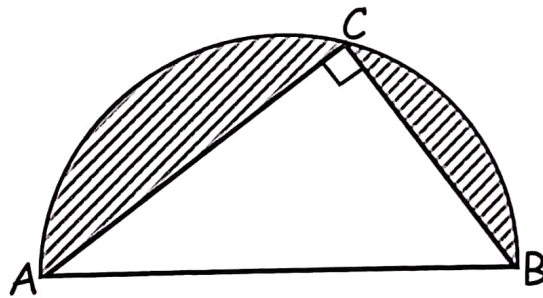| x	-2	___	0	___	2	3
y	⁻5	⁻3	___	1	___	___

27(a) Today is Monday, 23rd October, what day of the week was it on 11th July the same year ? (3 marks)

(b) Find the additive inverse of $^-7$. (1 mark)

28. Given the figure below, study and use it to answer the questions that follow .

(a) Find the length of line AB . (2 marks)

(b) Calculate the area of the shaded part .   (3 marks)
    (Take $\pi = 3.14$)

29. Mugisha went shopping and bought the following items.

    3 packets of wheat flour at sh. 7,800 each

    2000ml of cooking oil at sh. 6,500 per kilogram

    $1\frac{1}{2}$ kg of sugar at sh. 5,000 per kilogram

    A packet of baking powder at sh. 1,500

(a) Find Mugisha's expenditure .   (4 marks)

(b) Work out his change if he went shopping with a fifty thousand
    shilling note .   (1 mark)

30. Kintu spent $\frac{1}{4}$ of his monthly salary on food, $\frac{4}{5}$ of the remainder on fees and the rest on water. If he spent sh. 70,000 more on fees than on food,

(a) find the fraction he spent on water.   (3 marks)

(b) find Kintu's monthly salary.   (2 marks)

31. At Namagunga Primary Boarding School, the Main hall is 180m South of the Administration block and one of the Dormitories is 270m from the main hall on a bearing of 300^0.
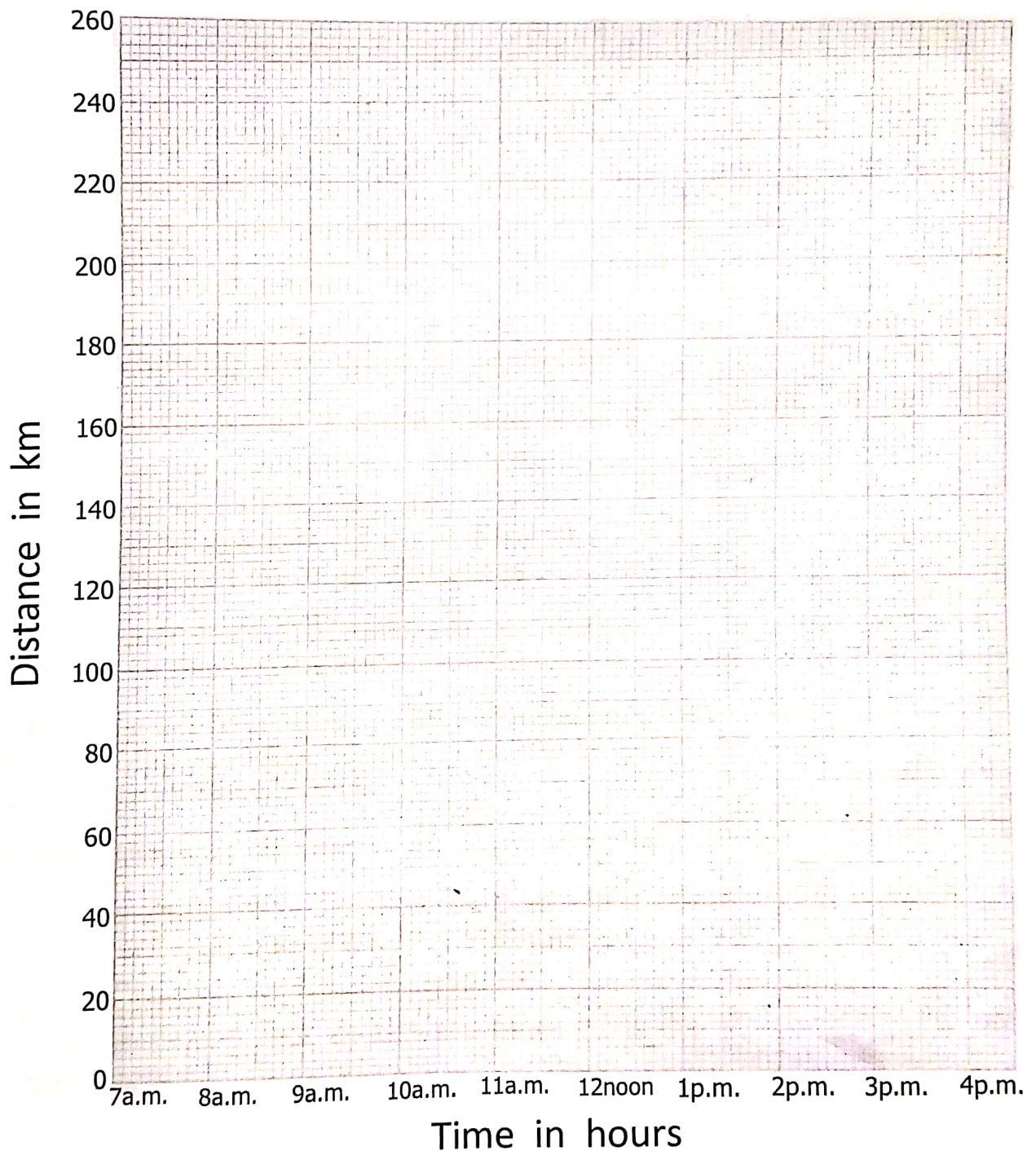
(a) Draw a sketch to show the above structures. (1 mark)

(b) Using 1cm to represent 30m, construct an accurate diagram to show the above structures. (4 marks)

32. Cheprop left town **K** for town **M** at 8:30a.m. driving at a steady speed of 38km/hr for $1\frac{1}{2}$ hours. He stopped at point **L** for a cup of tea which he took for 30 minutes. He then continued to town **M** driving at 50km/hr for 3 hours.

(a) Represent Cheprop's journey on the graph below.   (3 marks)

Time in hours

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(b) Calculate Cheprop's average speed while driving. (2 marks)

END

~ SUCCESS ~