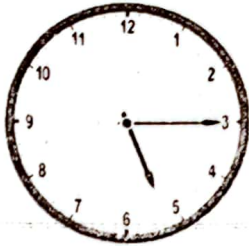## Section A (40 Marks)

1	Workout: 203 x 2	2	Write "nine hundred two thousand forty" in figures.
3	Today is **Wednesday**, what day of the week was it **67 days** ago?	4	Find the next number in the sequence below. 43, 42, 39, 33, 23, _____
5	Solve: $\dfrac{3n}{3} - 1 = 5$	6	How many elements are in a set with **31 proper subsets?**
7	Expand **85.37** using exponents.		
8	Akulo bought a dozen of facemasks at **sh. 5000.** She later sold each facemask at **sh.550.** Calculate the profit she made.	9	Express **400cm²** as square metres.

10	Change the evening time shown on the clock face below to 24 hour clock.	11	Work out: $3\frac{1}{4} \div 1\frac{3}{4}$
12	What value does 7 represent in the numeral 90743?	13	If a number is chosen at random from a set of numbers 1 to 10, what is the probability that a number chosen is a square number?
14	The bearing of town N from town M is 320°. What is the bearing of town M from N?	15	Given that: b = 5d +6 and d = 3. Find the value of b.

16 | Using a pair of compasses, a ruler and a sharp pencil only, construct an angle of 30°.

17	Samson stood in a straight line of boys on a health parade. He was the **9th** from one side and the **16th** from the other side. How many boys were on the parade?

18	Roselinda takes **15hours** to slash a compound. Jacob takes **10hours** to slash the same compound. How long will it take for the two workers to slash the same compound if they work together?

19	In a class of **43 pupils, 19** of them are boys and the rest are girls. Draw tallies to represent the number of girls in the class.	20	Find the **G.C.F** of 48 and 54.

21 (a) Work out: $321_{five} - 43_{five}$ (02marks)
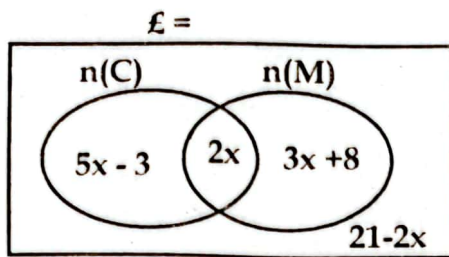
(b) Given that $4nn_{five} = 314_{six}$. Find the value of n.   (03marks)

22 Opoloti went to the market and bought the following items.

3 bars of soap at sh. 3500 a bar.
750ml of cooking oil at sh.12000 per litre.
21 apples at sh. 1800 for every 3 apples.
2kg of sugar at sh.7000.

(a) If he was given a 10% discount, how much did he pay for all the items?

(05marks)

23 The Venn diagram below shows the number of guests who ate chicken (C) and meat (M). Study it carefully and answer the questions that follow.

$£ =$

(a) If 30 guests did not eat meat at all, find the value of x.   (03marks)

(b) Find the total number of guests who attended the party.   (02marks)

24 A motorist drove his car from **10:45am** at an average speed of 36km/hr to **1:00pm**.

(a) Calculate the distance he covered.   (03marks)

(b) If his car consumes **6 litres** of diesel for every **18km** and each litre costs sh.6200. How much will the whole journey cost him?   (03marks)
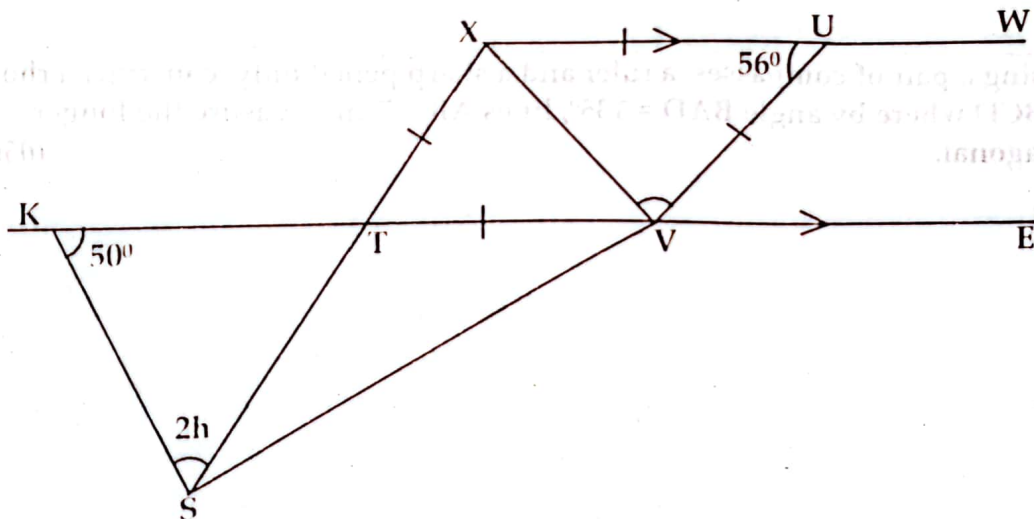
25 (a) Solve: $\frac{1}{5}(30 - 15k) = 3(k - 7)$. (03marks)

(b) Solve the inequality and state the solution set for $22 \leq 4x - 2 > 10$. (03marks)

26 In the diagram below, line XW is parallel to line KE. Study it carefully and answer the questions that follow.

(a) Find the value of h. (02marks)

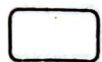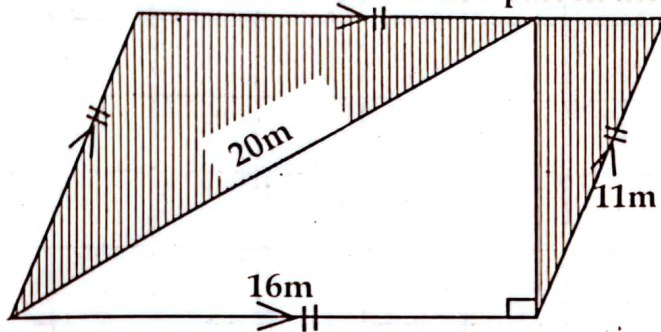|	
	(b) Find the size of angle XVE. **(03marks)**
27	A trader banked money in centenary bank which offers $2\frac{1}{3}$ % interest rate per year. If his account had an amount of sh. 181400 after a period of 4 months, calculate the money he banked. **(04marks)**
28	Using a pair of compasses, a ruler and a sharp pencil only, construct a rhombus ABCD where by angle BAD = 135⁰, lines AB = 7cm. Measure the longer diagonal. **(05marks)**

29 A box of guavas weighs **45kg**. The empty box weighs **1.8kg**. If each guava weighs **300gms**, how many guavas are in the box altogether? (04marks)
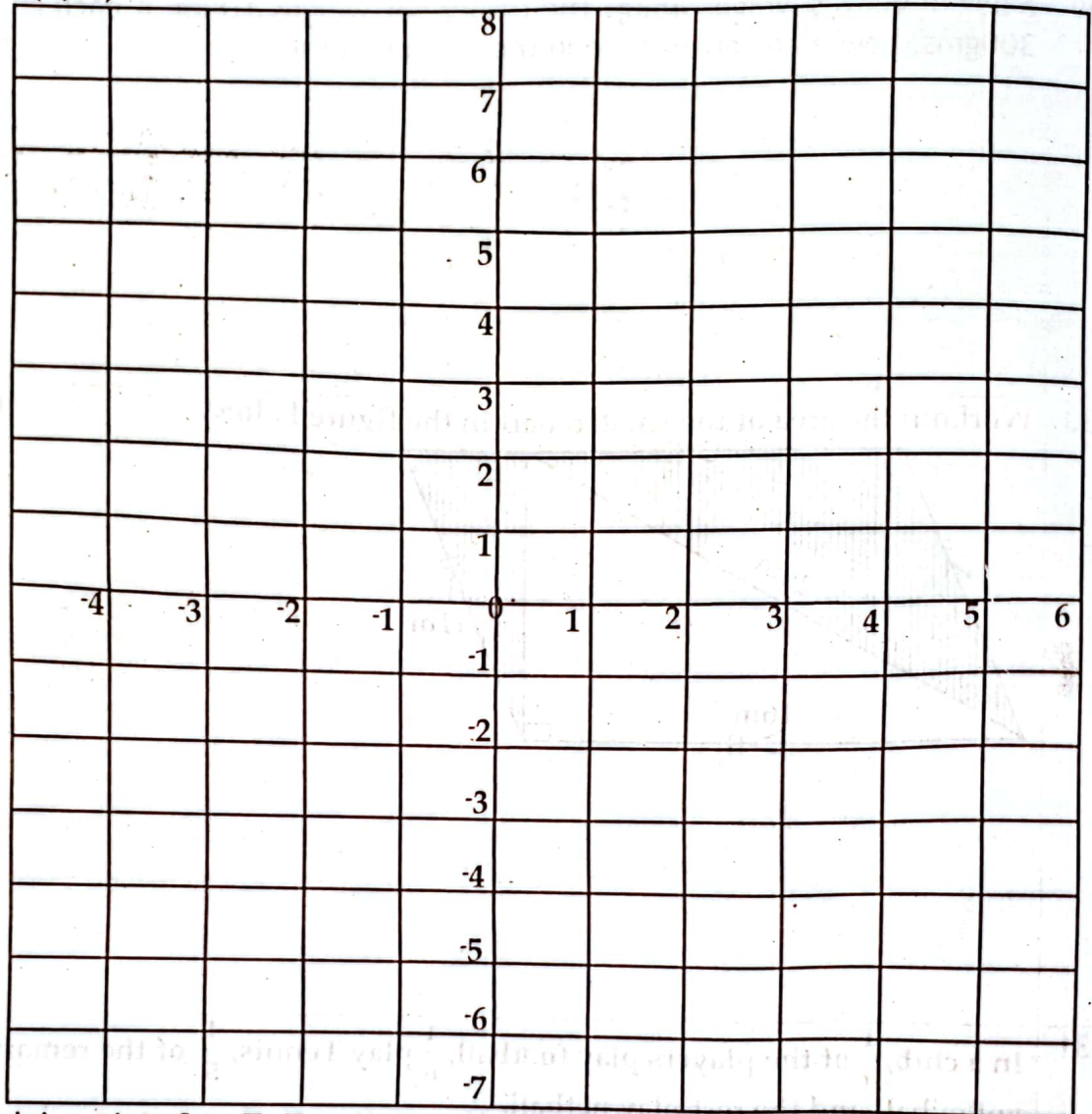
30 **Workout the area of the shaded part in the figure below.** (05 marks)

31 In a club, $\frac{1}{4}$ of the players play football, $\frac{1}{6}$ play Tennis, $\frac{4}{5}$ of the remainder play volleyball and the rest play netball.
(a) What fraction of the players play netball? (04 marks)

(b) If 21 players play netball, how many players are in the club altogether? (01 marks)

32 **(a)** Plot the following points on the grid below. S(-3, -4), T(-3, 1), U(2,5) and
V(2,-4)

(b) Join points **S** to **T**, **T** to **U**, **U** to **V**, **V** to **S**. find the area of the geometric
figure formed.

(01 mark)