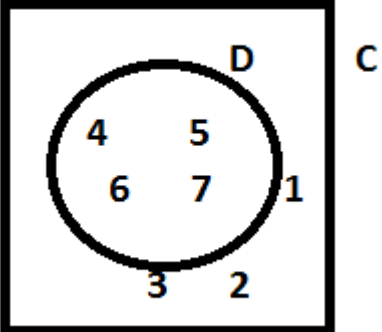
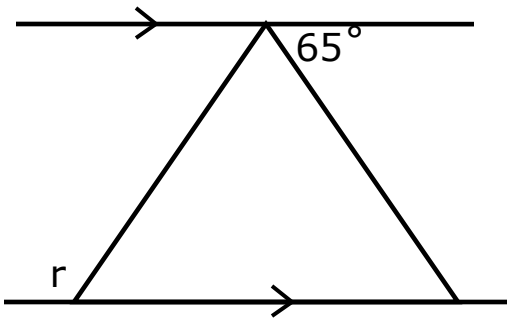


## SECTION A

1	Workout: $0 \div 2$	2	Write four hundred ninety two in figures.
3	<p>Given the sets C and D below.</p> <div style="text-align: center;"><p>The diagram shows a square labeled 'C' containing a circle labeled 'D'. Inside the circle, the numbers 4, 5, 6, 7, 1, 3, and 2 are arranged. The number 1 is on the right side of the circle, 2 is at the bottom right, 3 is at the bottom, 4 is on the left, 5 is at the top, 6 is at the bottom left, and 7 is at the bottom center.</p></div> <p>Find <math>n(C)</math></p>	4	Solve: $3p - 3 = 4$ (finite8 )
5	Express 60cm as a percentage of 3 metres.	6	What is the mean of $\frac{1}{2}$ and $\frac{1}{3}$ ?

7	<p>In the diagram below, find the size of angle r.</p> 	8	<p>Find the lowest common multiple of two numbers whose product and GCF is 360 and 6 respectively.</p>
9	<p>Work out: <math>4 \times 10^{-3}</math></p>	10	<p>Using a pair of compasses, a ruler and a pencil only, construct an angle of <math>105^\circ</math></p>

11	A tortoise at reptiles village has lived for 2490 years, Express the tortoise's age in Roman numerals.	12	Set Q has 63 proper subsets. Determine its number of elements.
13	Five sets cost sh. 20,000 How many similar sets can one buy with sh.36,000 at the same rate?	14	Simplify: $\frac{3k + 2}{4} - \frac{k + 1}{3}$
15	Calculate $(33.4 \times 9) - (9 \times 3.4)$ using distributive property.	16	Three porters can build the house in 6days. How many more porters will be needed to build the same house in 2 days working at the same rate?

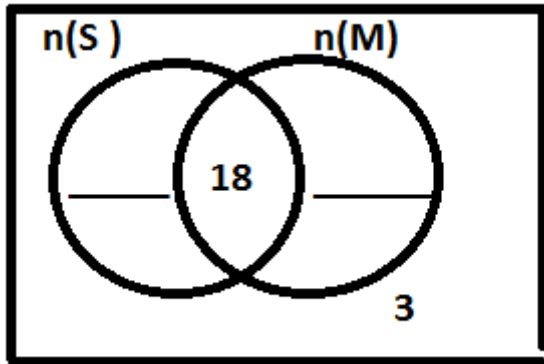
17	It is 8:00a.m now. What time of the day will it be after 68hours?	18	Electric poles were fixed on both sides of the road 2km long at intervals of 20m. How many poles were fixed?
19	In a class, there are 13girls and 12 boys. What is the probability of choosing a boy at random to become a prefect?	20	A tourist has Ug sh 82,500 and wants to buy Us dollars from a forex bureau. How many dollars will the tourist get if US \$1= Ugsh 2750?

SECTION B(60 MARKS)

21 In a class of 50 pupils, 32 like science(S), K like Maths (M) only, 18 like both subjects while 3 like both subjects.

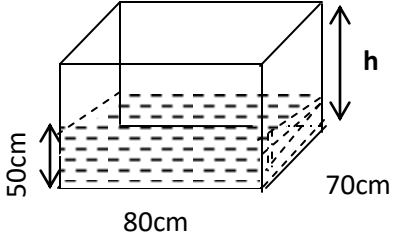
Complete the Venn diagram below. (2marks)

$$\varepsilon = 50$$

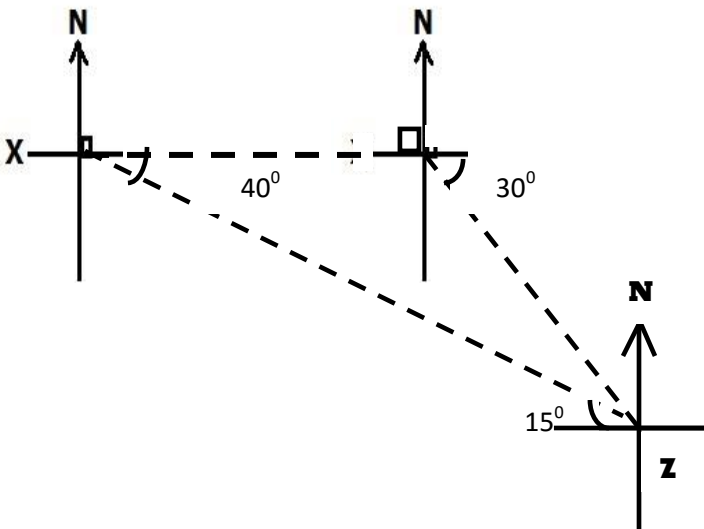


b) How many pupils like maths? (2marks)

c) Find the probability of choosing a pupil at random who does not like mathematics to be a captain. (1mark)

<p>22 a)</p>	<p>In a village of 450 people, <math>\frac{3}{5}</math> are males and the rest are females. <math>\frac{2}{3}</math> of the males are above 18 years and <math>\frac{1}{4}</math> of the females are below 18 years. Find the total number of people below 18 years of age. (3marks)</p>
<p>b</p>	<p>If the number of males increased by 30, in what ratio did it increase? (2marks)</p>
<p>23 a)</p>	<p>The tank below is <math>\frac{1}{3}</math> full of water.</p>  <p>How many litres of water are in the tank? (2marks)</p>

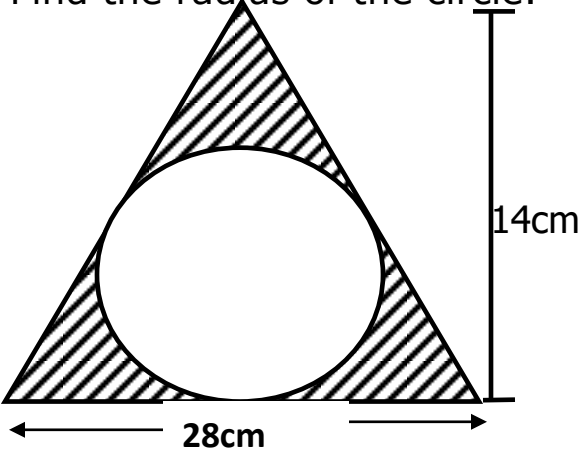
b	How many litres are needed to fill the tank? (2marks)
c	Find the water level when the tank is completely full of water. (1mark)
24a	The scale on a map is 1:9000. If the distance on the map is 5cm, what is the actual distance in km? (2marks)

b	<p>Use the diagram below to answer the questions that follow.</p> 	(2marks)
b	<p>Find the direction of:</p> <p>(i) Y from Z</p> <p>(ii) Z from X</p>	<p>(1mark)</p> <p>(1mark)</p>
25a	Solve: $9 - 2p = 3$	(2marks)
b	Six years ago, a man was ten times as old as the daughter.	



	<p>If the sum of their present age is 45 years, how old is the daughter? (3marks)</p>									
<p>26a</p> <p>b)</p>	<p>Using a pair of compasses, a ruler and a pencil only construct a parallelogram PQRS, where by <math>PQ = 7.7\text{cm}</math>, angle <math>PQR = 45^\circ</math> and line <math>QR = 3.8\text{cm}</math>. (4marks)</p> <p>Measure angle PRS (1mark)</p>									
<p>27</p>	<p>Study the following exchange rates and answer the questions that follow.</p> <table border="1" data-bbox="321 1728 1360 1864"> <thead> <tr> <th>Currency</th> <th>Selling price (Ug sh)</th> <th>Buying price (Ug sh)</th> </tr> </thead> <tbody> <tr> <td>Ksh 1</td> <td>36</td> <td>35</td> </tr> <tr> <td>US \$ 1</td> <td>3600</td> <td>3560</td> </tr> </tbody> </table>	Currency	Selling price (Ug sh)	Buying price (Ug sh)	Ksh 1	36	35	US \$ 1	3600	3560
Currency	Selling price (Ug sh)	Buying price (Ug sh)								
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a)	<table border="1" data-bbox="321 193 1360 239"> <tr> <td>£</td> <td>1</td> <td>4850</td> <td>4800</td> </tr> </table> <p>Anam had Ksh 2500, how much money in Uganda shillings did he get? (2marks)</p>	£	1	4850	4800						
£	1	4850	4800								
b)	<p>If Alvin had 240 pound sterling, How many US dollars did he get? (3marks)</p>										
28	<p>The equation of a line is <math>x = y - 2</math> Complete the table using the equation. (4marks)</p> <table border="1" data-bbox="344 1054 1026 1239"> <tr> <td>X</td> <td>_____</td> <td>2</td> <td>-2</td> <td>_____</td> </tr> <tr> <td>Y</td> <td>4</td> <td>_____</td> <td>_____</td> <td>-2</td> </tr> </table>	X	_____	2	-2	_____	Y	4	_____	_____	-2
X	_____	2	-2	_____							
Y	4	_____	_____	-2							

29	<p>The number of right angles of a polygon is 12. Calculate the number of sides of a polygon. (2marks)</p>
b	<p>The sum of interior angles of a regular polygon is <math>1440^\circ</math>. Find the size of each exterior angle. (3marks)</p>
30	<p>The area of the shaded part in the figure below is <math>42\text{cm}^2</math>. Find the radius of the circle. (4mks)</p> 

31	<p>An exercise book costs sh.330. Walugembe uses 12 books every term. How much does walugembe's father spend on his books in every school year of three terms? (3marks)</p>
b	<p>Bernard had a half loaf of bread. He shared it among his 6 visitors. How much did each visitor receive? (2marks)</p>
32	<p>The sum of three consecutive even numbers is 66, If the middle number is m, Find the value of m (2marks)</p>
b)	<p>Find their product. (2marks)</p>

\*\*\* End \*\*\*