



# STANDARD JUNIOR SCHOOL - ZZANA

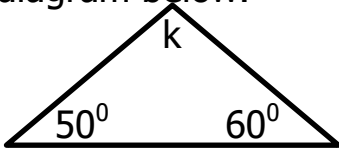
## MATHEMATICS (SET 5)

*Time Allowed: 2 hours 30 minutes*

NAME: .....

### SECTION A: 40 MARKS

1.	Workout; $32 \times 3$	2.	Write 650,019 in words.
3.	Workout; $\frac{1}{3} + \frac{1}{4}$	4.	Find the next number in the sequence 4, 6, 8, 9, .....
5	Solve the equation; $7n + 2 = 23$	6.	Given that set $N = \{c, t, p\}$ List all the subsets in $n$
7.	Find the number which has been expanded $(3 \times 10^2) + (5 \times 10^0)$	8.	The profit of a shirt sold at sh.7,900 was sh.2,100. Calculate the cost price of the shirt.

9.	Change 10meters into centimeters.	10.	Write 9;30 a.m in to the 24 hour clock.
11.	Workout; $1\frac{1}{2} - \frac{2}{3}$	12.	Find the value of 6 in the number 850,634.
13.	A box contain 20 pens,10 are blue and the rest are black. A pen is picked at random from the box, find the probability that it is a black pen?	14.	Construct an angle of $90^0$
15.	Find the size of angle k in the diagram below. 	16.	Given that $a=3$ and $b=2$ ,find the value of $a^2 - b^3$

17.	The cost of 6 pens is sh.3000. Find the cost of 4 pens at the same rate.	18.	Draw a shape of a cylinder.
19.	Expand 24.349 using powers of ten.	20.	Find the list number of the sweets when divided among 8 boys or 6 girls equally, leaves 2sweets as the remainder.

## SECTION B (60 MARKS)

21. Workout; 
$$\begin{array}{r} 3 \ 3 \ 4_{\text{five}} \\ +1 \ 2 \ 3_{\text{five}} \\ \hline \end{array}$$

b. given that  $34_t = 112_{\text{four}}$ , find the value of t.

22. A Fredrick went to the market with sh.50,000 and bought the following item;

**3 litres of milk at sh.2,400 per litre**  
**250g of salt at sh.2000 per kg**  
**18 oranges at 1500 for every 6 oranges**

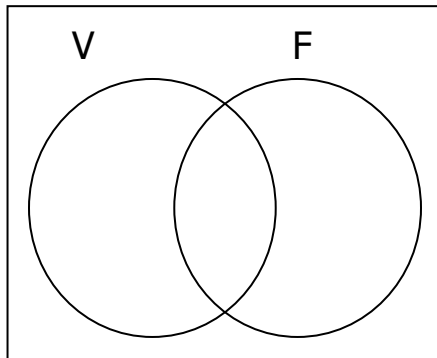
a) Calculate the total cost of the items.

b) Find his change

23. In a class of 50 pupils, 32 pupils play football(f) ,31 play volley ball (V), k play both games and 2 pupils play none of the two games.

a. Complete the venn diagram below using the above information.

$$n(\Sigma)=50$$



b) How many pupils play both games?

c) Calculate the number of pupils who play only one game.

24. In the class of 60 pupils  $\frac{1}{5}$  of them are boys and the rest are girls

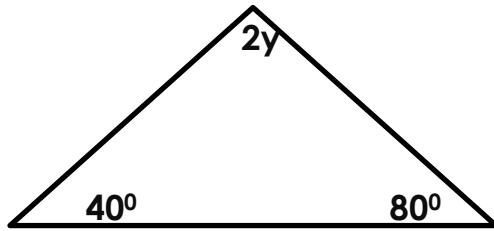
a) Find the fraction of girls in the class.

b) How many boys are in the class

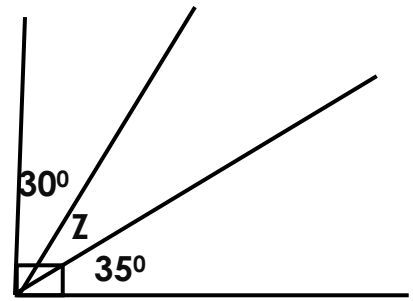
	c) How many more girls than boys are there in the class?
25.	<p>. solve the equation ;<math>6 = -2 + n</math></p> <p>a. Workout: <math>+3 + ^{-}4</math> using a number line.</p>
26.	The sum of three consecutive even numbers is 36. Find the product of the first and last numbers.

27. Find the value of the unknowns in the diagrams below

a)



d)

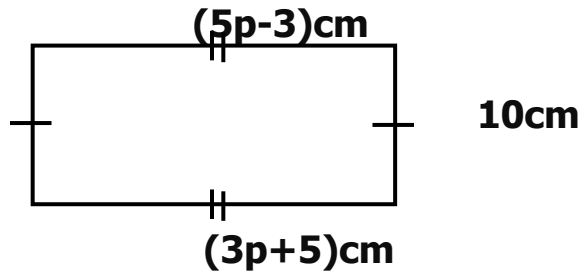


28. Using a ruler ,a pencil and a pair of compass only, construct a square ABCD with side 5cm.

29. (a) Solve for  $y$ ;  $2^y = 32$

(b) Evaluate ;  $7y + 7 - 3y - 8$

30. Study the diagram below and use it to answer the questions.



a) Find the value of **p**.

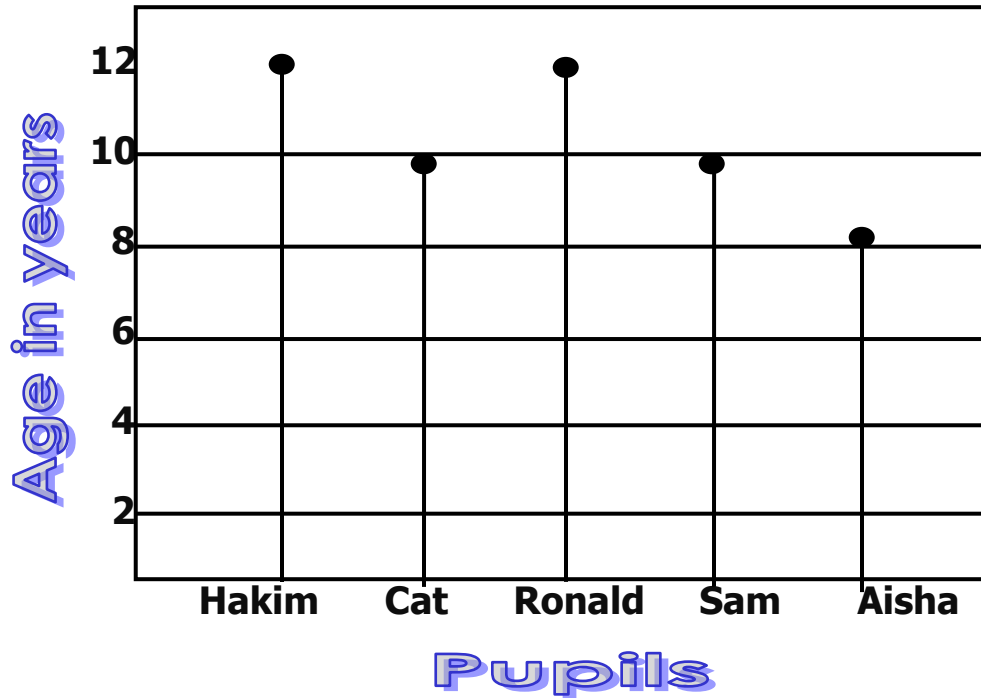
b) **Workout:**

i) the perimeter of figure above.

ii) its area.



31. **The graph below shows the age of 5 pupils. Study it and answer the questions that follow.**



a) Name the pupils with the same age.

b) Who is the youngest pupil?

c) Find their mean age?

32. a) A bus travelling at a speed of 60km per hour covered a distance of 240km. How long did it take?

b) A football match started at 4:15p.m and ended at 5:55p.m. How long did it last?

c) A cyclist covered a distance of 60km in  $2\frac{1}{2}$  hours. At what speed was he cycling?