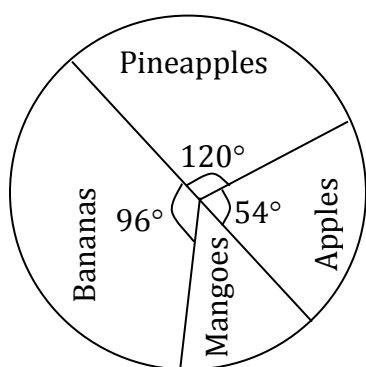


S.2
MATHEMATICS
TEST

2 Hours

INSTRUCTIONS: *Answer all questions*

- Two traffic lights flash at intervals of 64seconds and 96seconds. If they start flashing at the same time, after how long will they flash again together?
- The average mark of 5 students is 15. When three students with the marks x , $(x + 5)$ and $(x + 7)$ are included, the average mark becomes 12. Determine the value of x .
- Ismael buys x cans of soda at shs 3000 shillings each and $(x + 4)$ cans of soda at shillings 3500 each. The total cost was shillings 335000. Find x
- Mr. Hamis, a retailer buys 30 boxes of strawberries at sh. 3000 each and sells 27 boxes at 30% profit. How much profit does he make?
- The pie-chart below shows the fruits popularly sold daily in a canteen at khulafa Islamic S S



If 420 apples were sold on a given day, determine;

- The total number of fruits that were sold that day.
- How many mangoes were sold that day?

- Find the value of base: $45_x = 41_{ten}$
- In a Geography examination the percentage marks for 50 boys were as follows:

35	51	83	60	61	73	44	90	70	93
56	34	52	61	43	57	40	58	88	64
52	71	25	86	79	35	73	44	71	95
63	53	48	78	65	98	28	72	67	82
46	54	62	35	70	41	63	73	50	68

- Construct a frequency table taking class intervals of 21 – 30, 31 – 40,
 - Calculate the mean using the assumed mean of 65.5.
 - Draw a cumulative frequency curve and estimate the median mark.
- The daily earnings of 50 workers are given in the table below:

Earnings per day in dollars	51 – 75	76 – 100	101 – 125	126 – 150	151 – 175	176 – 200
Number of workers	1	4	17	15	11	2

- Draw a histogram curve and use it to estimate the modal earning.
- A worker is chosen at random from that group, find the probability that he/she earns less than 126 dollars per day.

END