PRIMARY MATHS SERIES

REVISION GUIDE FOR STANDARDS 7 AND 8

Elijah M. Michieka And Paul Otinga



www.kenpro.org

Nairobi, Kenya



Kenya Projects Organization (KENPRO) is committed to the noble ideals of sharing knowledge through Research and Publishing engagements. The organization continues to reap from the rich traditions of knowledge inherited from the past generations. She is committed to passing these traditions to the present and future generations through publishing.

Published by Kenya Projects Organization (KENPRO),

Magadi Road, Ongata Rongai | P.O. Box 3029-00200 Nairobi |

Mobile: +254 725 788 400 |

Email: <u>kenpropublications@gmail.com</u> |

Website: www.kenpro.org

ALL RIGHTS RESERVED. No part of this resource may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without prior permission in writing from the author and/or publisher.

TABLES AND GRAPHS

8.1 Specific Objectives

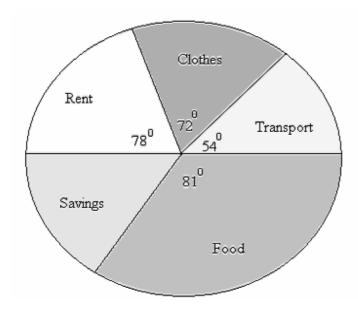
By the end of the unit, the learner should be able to:

- a) Draw tables and graphs,
- b) Interpret tables and graphs,
- c) Identify median as a middle value in a set of ordered data and
- d) Work our problems involving mean, mode and median.

8.2 Worked Exercise

Working

1. The pie chart shown below shows how Erustus spent his salary. How much did he spend on food and transport if he saved sh2500



A. Sh 4500

B. Sh 12000

C. Sh 2500

D. Sh 5000

Working

The angle representing savings

$${360 - (78 + 72 + 54 + 81)} = 75^{\circ}$$
If $75^{\circ} = \text{Sh } 2500$
 $360^{\circ} = ?$

$$=$$
 (360 x 2500)

75

= Sh 12000

Food and transport = 54 + 81

= 135

· · · (<u>135</u> x 12000) Sh

= Sh 4500

The correct answer is A (Sh 4500)

2. Eleven standard 4 pupils of St. John school scored a test as follows 95, 50, 48, 63, 58, 75, 48, 44, 58, 84, 48. Which of the following a arrangements shows the mean, mode and median of the marks?

A. 58, 61, 48

B. 61, 48, 58

C. 61, 58, 48

D. 48, 58, 61

Working

Mean = <u>Total marks</u>

No of children

= 671

= 61 marks

median; 44, 48, 48, 48, 50, 58, 58, 63, 75, 84, 95

The number in the middle is 58.

Mode: is the number appearing many times.

The correct answer is B (61, 58, 48)

3. Njoroge scored as follow in a test.

70, 55, 80, 50, 55

What is his means score?

A. 55

B. 62

C. 65

D 80

Working

Mean =
$$(70 + 55 + 80 + 55 / 5)$$

8.3 Practice Test Paper 8

1. The table below shows the number of people who attended a funeral service

MEN	WOMEN	CHILDREN
986	3145	5807

How many more children than adults attended the service?

- A. 4131
- B. 1676
- C. 2662
- D 4821

2. A kiosk owner bought 10 liters of water on Monday, on Tuesday and Wednesday a total of 50 were bought. Equal number of litres were bought on Thursday and Friday. Altogether 120 liters were bought during the five days. If a pie chart was drawn. What angle would represent the liters of water bought on Friday?

- A. 180^{0}
- $B.90^{0}$
- $C.150^{0}$
- $D.30^{0}$

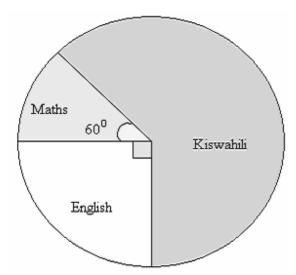
3. The table below shows the number of different vehicles which transported people to a show.

DAYS	CARS	MATATUS	BUSES
SATURDAY	43	18	8
Sunday	32	22	7

Each car took 4 people, each matatu 16 people and each bus 60 people. How many people had visited the show by the end of the second day using the three types of vehicles?

- A.160
- B. 900
- C. 1840
- D. 10400

4. Pupils chose their favorite subjects among mathematics, English and Kiswahili. The information was represented on the pie chart below



If 140 pupils chose Kiswahili, how many more pupils chose English than mathematics?

- A. 100
- B. 60
- C. 40
- D. 20

5. Ten pupils in a class sat for a text and had a mean score of 6.3. The scores of nine of the pupils were 3, 4, 5, 6, 7, 8, 8, 8 and 9. What was the score of the tenth girl?

- A. 5
- B. 7
- C. 8

D. 10

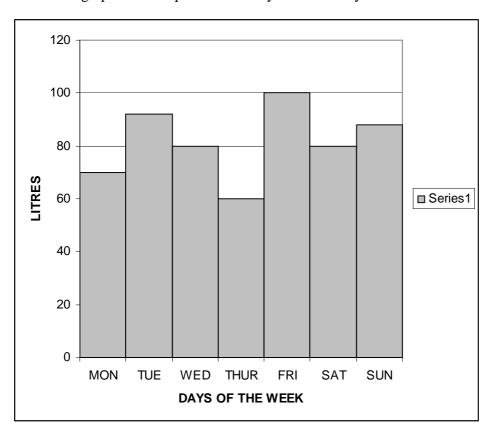
6. The table below shows the sales of shoes in

Size	4	5	6	7	8	9	10	11	12
No. of pairs	4	8	12	11	8	9	5	2	3

Which was the model size?

- A.12
- B. 10
- C. 8
- D. 6

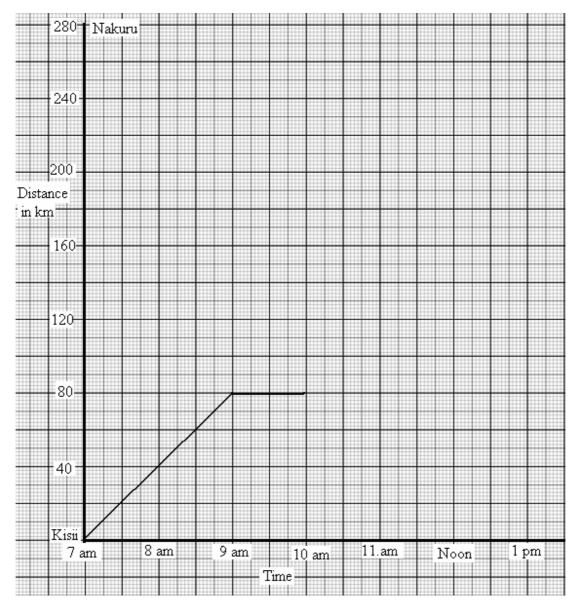
7. The bar graph below represents weekly milk delivery records in a certain diary.



On which four consecutive days was the total amount of milk delivered greatest?

- A. Mon; Tues; Wed; Thu
- B. Tues; Wed; Thu; Fri;
- C. Wed, Thu; Fri; Sat
- D. Thu, Fri, Sat Sun

8. The graph below shows part of the journey taken by a bus to Nakuru from Kisii.



If the remaining journey took him 2 hours, what was the average speed for the whole journey?

A. 56km/h

B 40km/hr

C 100km/hr

D 70km/h

9. The table below shows bus fare from Kisumu to Kakamega.

Kisumu				
70]			
	Nyango'ri			
190	125	Mbale		
265	200	75	Sigalagala	
300	250	150	85	Kakamega

Two adults and 40 children traveled from Kakamega to Nyango'ri. The following day they traveled from Nyango'ri to Kisumu. The fare for a child is half of that for as adult. How much did they pay altogether for the whole journey?

A. Sh 4290

B. Sh 7040

C. Sh 6600

D. Sh 6720

10. The table below shows the number of liters of milk delivered to a a dairy during one week.

DAY	SUN	MON	TUE	WED	THU	FR	SAT
LITRES	44	45	42	48	46	49	41

On which four consecutive days was the total amount delivered the LEAST?

A. Sun, Mo

Mon, Tue,

Wed

B. Mon,

Mon, Tue,

Wed, Thu

Sat

C. Tue,

Wed,

Thu, Fri

D. Wed,

Thu, Fri,

11. The table below shows Gabriel scores in a class.

Subjects	Eng	Maths	Kisw	Scie
Scores out of 10	8	5	7	4

If a pie chart was drawn, what would be the size of the angle representing Kiswahili?

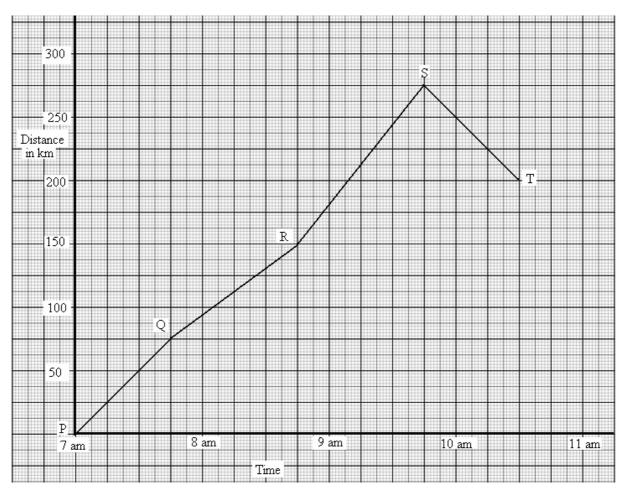
A. 105°

B. 252°

C. 63°

D 53 ½°

12. The graph below shows a motorist's journey from town P to town T through Q, R and S



Between which two towns was he traveling at the lowest speed?

- A. P and Q
- B. Q and R
- C. R and S
- D. S and T

13. The table below shoes distance in kilometers between towns A, B, C and D

A			
90	В		
123	147		
113	150	82	
			D

What is the distance from D to A via C?

A. 205 km

B. 123 Km

C. 319 Km

D. 113 Km.

14. The mean mass of 8 pupils is 37 ½ kg. Six of the pupils weigh 30kg, 39kg, 35kg, 40kg and 38kg. If the remaining two pupils had equal masses, what is the median mass for the eight pupils?

A. 38 1/2kg

B. 38kg

C. 42kg

D. 36 1/2 Kg

15. During Joy's birthday, a third of her friends took orange juice, a sixth lemon juice and a fifth of the remainder passion fruit juice. The rest took pineapple juice. What angle would represent the number of friends who took pineapple juice if this information was represented in a pie chart?

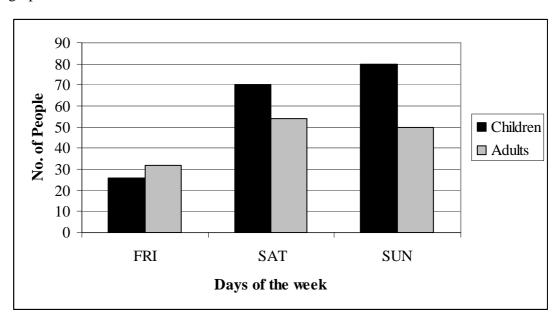
A. 72°

B 108°

C. 144°

D 216°

16. The Nairobi safari walk received visitors in a certain weekend as represented in the graph below.



How many more children than adults visited the park during that weekend?

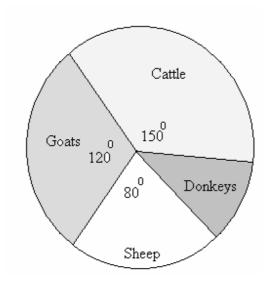
A. 176

B. 136

C. 50

D. 40.

17. The pie chart shown below shows the number of animals owned by Ole korinko. He has 5 donkeys in his firm.



What is the total number of sheep and goats in Ole Korinko's farm?

- A. 40°
- B. 60°
- C. 100°
- D. 200°

18. The following shows the number of pupils in a school?

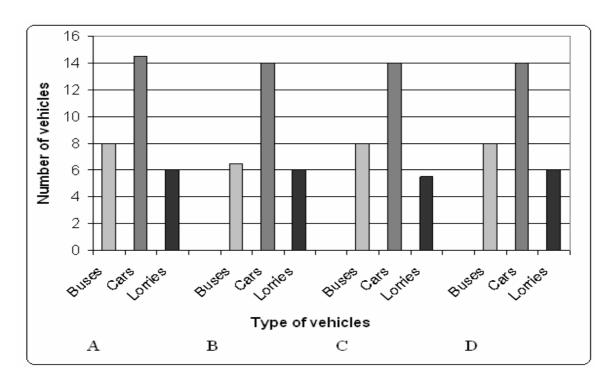
Class	Pre- school	Std 1	Std 2	Std 3	Std 4	Std 5	Std 6	Sad 7	Std 8
No. of Pupils	38	40	23	25	38	25	41	40	36

What was the median number of Children?

- A. 4
- B. 28
- C. 34
- D. 36

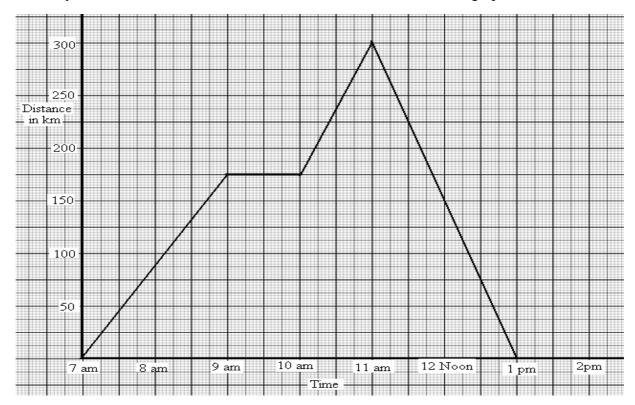
19. The following table shows the number of different types of vehicles passing near Red School.

Type of vehicle	Buses	Cars	Lorries
Number of vehicles	8	14	6



Which of the following bar graphs CORRECTLY represents this information?

20. A cyclist traveled from town K to town N and back, as shown in the graph below



What was the Cyclist average speed for the whole journey?

A. 120Km/hr

B. 100Km/hr

C. 75Km/hr

D. 50 Km/hr

21. A dairy farmer shipped milk to a dairy plant as shown below. The amount of milk for Friday is not shown.

Days	Mon	Tue	Wed	Thu	Fri	Sat	Sun
No of litres	410	315	400	410	-	300	420

One liter costs Sh 18. If the mean sale per day was 380 liters, how much more money did the farmer get from selling milk on Friday than on Tuesday?

A. Sh 7,290

B. Sh 5,670

C. Sh 1,620

D. Sh 1,170

22. In class of 50 pupils, the score in an English test was 60. The mean score for the first 40 pupils was

23. What was the mean score for the last 10 pupils?

A. 600

B. 800

C. 2,200

D. 3000

23. The height of a pupil in a class is as follows; 1.67m, 1.7m, 1.67m, 1.75m, 1.72m, 1.67m, 1.68m. If the mean height of 9 pupils was 1.69m, what was the median height?

A.1.7 m

B 1.68 m

C 1.67 m

D. 1.65 m

24. The table below shows the number of liters of milk supplied to a dairy in a week.

DAYS	MON	TUE	WED	THU	FRI	SAT
MILK IN LITRES	20	17	21	15	21	22

what was the median sale, in liters for the 6 days?

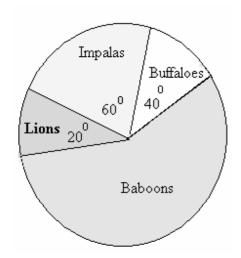
A. 18

B. 191/3

C. 20 ½

D 21

25. The pie chart below represents the population of 1800 animals in a game park.



How many more baboons than impalas are there in the farm?

- A. 300
- B 900
- C. 1200
- D 180

26. The number of birds in a certain areas during April to August as shown below

Months	April	May	June	July	August
No. of birds	96	104	80	118	94

In which two consecutive months was the highest mean number of birds recorded?

- A. April and May
- B. May and June
- C. June and July
- D. July and August

27 The table below shows the number of crates of bread Simaloi sold in a week. The number of crates sold on Friday is not recorded.

Day	Mon	Tue	Wed	Thu	Fri	Sat	Sun
No of crates	8	10	11	18	-	16	8

What is the median sale if the number of crates sold for the whole week is 84?

A. 13

B. 12

C. 11

D. 8

28. The table below shows the fare in shillings for a matatu traveling from Narok to Nairobi?

Nairobi				
150	Limuru			
200	50	Maai mahiu		
250	150	100	Narok	

Fourteen passengers boarded a matatu at Nairobi. Seven of the passengers alighted at Maai mahiu, while five others boarded at maai mahiu for narok. How much money altogether did the driver collect?

A. Sh 3650

B. Sh 3500

C. Sh 3150 D SH 1900

29. A football team of eleven players went to a hotel for lunch. The hotel offered meals on prices as shown in the table

	Ugali	Rice	Chips
Beef	Sh 60	Sh 65	Sh 75
Chicken	Sh 75	Sh 70	Sh 100
Fish	Sh 75	Sh 80	Sh 105

5 Players each took *ugali* with chicken, 3 players each took chips with fish. The remaining players each took rice with beef. Kimanzi gave two-five hundred shillings note, to pay for the lunch. How much balance did he receive?

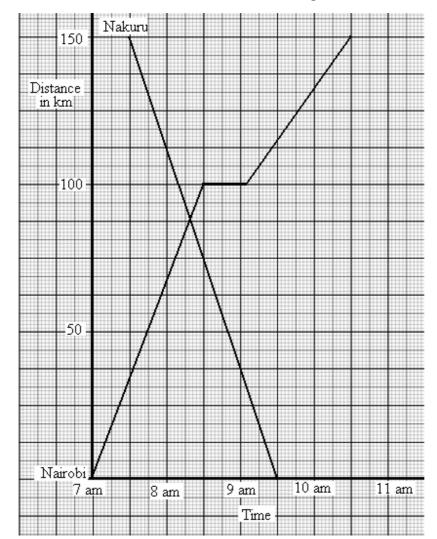
A. Sh 55

B. Sh 115

C. Sh 310

D. Sh 885.

30. The graph below shows two motorists one driving from Nairobi to Nakuru and the other from Nakuru to Nairobi but of different speeds.



How far from Nakuru was motorist A when B reached Nairobi?

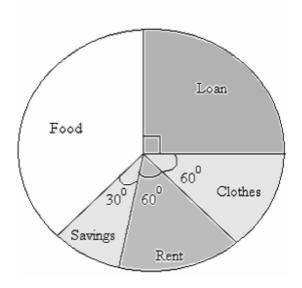
A.115km

B. 90 km

C. 60 km

D. 35 km

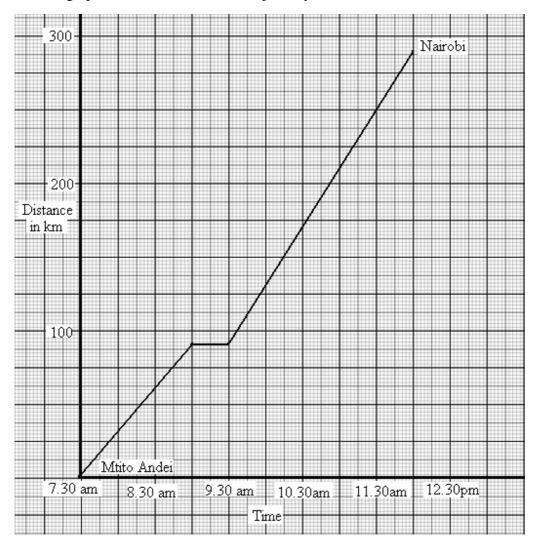
- 31. A kiosk sells soda, juice, porridge and tea. A pie chart was drawn to represents the number of people who took each drink. Those who took juice were represented by 140° and porridge by 40°. The size of the angle of those who took tea was twice the angle for soda. Twenty people took porridge. How many more people took juice than those who took tea?
- A. 10
- B. 60
- C. 70
- D. 130
- 32. The pie chart below shows how a teacher spent his salary



He spent 4000 on food. How much more did she spend on loan than on rent?

- A. Sh 1000
- B. Sh 2000
- C. Sh 3000
- D. Sh 5000

33. The graph below shows Wambua's journey from Mtito Andei to Nairobi.



What was his average speed, in km/h, for the whole journey?

- A. 72 ½
- B. 64 4/9
- C. 44 4/9
- D. 70

34. The ages, in years, of 10 boys in standard 7 are as follows; 16, 18, 15, 14, 17, 16, 14, 13, 19, 14.

What is the median age?

- A. 16 ½
- B. 15 3/5
- C. 15 ½
- D. 14

35. The table below shows ken's income from sale of his farm produce. The information on the income for his potatoes is not given.

Produce	Wheat	Maize	Beans	Potatoes
Income	Sh 450000	Sh 36000	Sh 21000	-

A pie chart was drawn to represent the information above. If the angle representing the income for beans is 63⁰, what was the income for potatoes?

A. Sh 120000 B. Sh 18000 C. Sh 17850 D. Sh 102000

36. The total number of pupils enrolled in schools in a certain district was 48000. In a pie chart the number enrolled in secondary schools was repeated by an angle of 120° while that of primary schools was represented by 150°. The rest were enrolled in the preprimary schools. How many children were in that school?

A.36, 000 B 20,000 C. 16, 000 D. 12, 000

37. The mean of six numbers is $4 \frac{2}{3}$. Five of these numbers are 5, 3, 7, 8 and 3. What is the median of the six numbers?

A. 2 B. 3 C. 4 D. 5

8.4 Practice Test paper 8 Answers

1		11	21	31	
2		12	22	32	
3		13	23	33	
4		14	24	34	
5		15	25	35	
6		16	26	36	
7		17	27	37	
8		18	28		
9		19	29		
10	_	20	30		