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# COUNTY MOCK EXAMS-STD 8 2016

## MATHEMATICS PAPER

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**BARINGO COUNTY**  
**KOIBATEK MOCK EXAMS**  
**STANDARD. 8 - 2016**  
**MATHEMATICS**

Time: 2 hrs

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question booklet and a separate answer sheet. The question booklet contains 50 questions.
2. Do any necessary rough work in this booklet.
3. When you have chosen your answer, mark it on the ANSWER SHEET, not in this question booklet.

**HOW TO USE THE ANSWER SHEET**

4. Use only an ordinary pencil.
5. Make sure that you have written on the answer sheet.

YOUR INDEX NUMBER  
YOUR NAME  
NAME OF YOUR SCHOOL

6. By drawing a line on the correct numbered ellipses (small oval shapes) mark your full Index Number (i.e School Code Number and three-figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the ellipses.
8. Keep the sheet as clean as possible and do not fold it.
9. For each of the questions 1 - 50 four answers are given. The answers are lettered A, B, C, D. In each case only ONE of the four answers is correct. Choose the correct answer.
10. On the answer sheet show the correct answer by drawing a line on the ellipse in which the letter you have chosen is written.

**Example**

13. Abraham is  $t$  years old. His mother is 6 times as old as Abraham. How old will his mother be in 10 years time?
- A.  $(t + 10)$  yrs  
B.  $(6t + 10)$  yrs  
C.  $(7t + 10)$  yrs  
D.  $(7t + 20)$  yrs

The correct answer is C  $(7t + 10)$  yrs  
On the answer sheet:

10. (A) (B) (C) (D)

11. (A) (B) (C) (D)

12. (A) (B) (C) (D)

13. (A) (B) (C) (D)

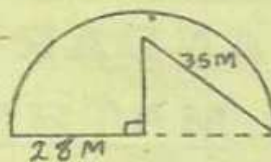
In the first set, a line is drawn within the letter C

11. Your dark line MUST be within the letter.
12. For each question, ONLY ONE ellipse is to be drawn a line in each set of four ellipses.

TURN OVER

- Write 1505005 in words  
 A. One hundred and fifty thousand five thousand and five  
 B. Fifteen million five thousand and five  
 C. One hundred and fifty thousand five thousand and five  
 D. One million five hundred and five thousand and five
- Work out the following:  
 $4(24 - 12) - 3(6 - 2)$   
 A. 36  
 B. 24  
 C. 48  
 D. 12
- What is 7285.9654 rounded off to the nearest hundredths?  
 A. 7285.97  
 B. 7285.965  
 C. 7286.00  
 D. 7286.97
- A school conducts assessments tests after every 2 weeks in standard 4, 3 weeks in standard 5 and four weeks in class six. After how many weeks will the school conduct tests in all the classes together?  
 A. 24 weeks  
 B. 6 weeks  
 C. 8 weeks  
 D. 12 weeks
- How many groups of thousands are in the value of digit 4 in the number 349685?  
 A. 4  
 B. 400  
 C. 40  
 D. 4000
- Wanyama bought the following items from a shop:-  
 3 packets of salt for sh 40  
 2 packets of tea leaves at sh 55  
 5 match boxes at sh. 3 per box  
 $3\frac{1}{2}$  kg of sugar @ sh 30 per 500g  
 3kg of fat at sh 45 per  $\frac{1}{2}$  kg  
 What balance did he receive if he paid using a sh 1000 note?  
 A. sh 645  
 B. sh 355  
 C. sh 595  
 D. sh 405
- Evaluate:  $\frac{1}{3} + 6 > 3x =$   
 A.  $x > 2\frac{1}{4}$   
 B.  $x < 2\frac{1}{4}$   
 C.  $x > 1\frac{1}{5}$   
 D.  $x < 1\frac{1}{5}$
- Find the perimeter of a square piece of land with twice an area of  $3362m^2$ .  
 A. 164 m  
 B. 232 m  
 C. 186 m  
 D. 214 m
- Which is the correct order of writing the fractions:  $\frac{3}{4}, \frac{5}{8}, \frac{11}{16}$  and  $\frac{13}{24}$  in descending order?  
 A.  $\frac{13}{24}, \frac{5}{8}, \frac{11}{16}, \frac{3}{4}$   
 B.  $\frac{3}{4}, \frac{11}{16}, \frac{5}{8}, \frac{13}{24}$   
 C.  $\frac{3}{4}, \frac{11}{16}, \frac{5}{8}, \frac{13}{24}$   
 D.  $\frac{11}{16}, \frac{3}{4}, \frac{5}{8}, \frac{13}{24}$
- Construct a triangle QRP with QR = 6.5cm, RP = 7cm and angle QRP =  $67^\circ$ . Bisect angle QPR and let the bisector meet line QR at Y. Measure angle PYR.  
 A.  $92^\circ$   
 B. 28  
 C.  $60^\circ$   
 D.  $88^\circ$

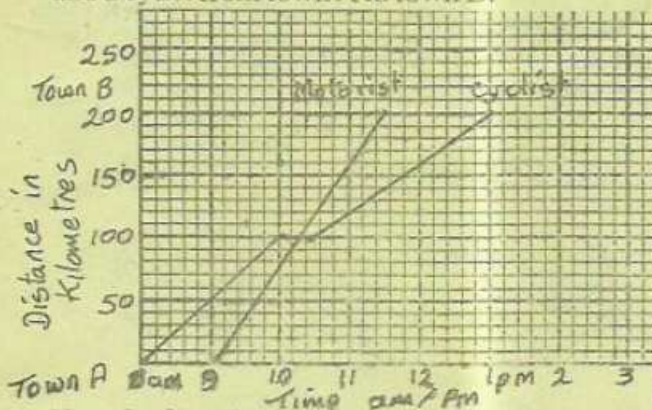
- The figure below represents Nyabuto's piece of land. He fenced the plot using three strands of wire. What was the total length of wire used?



- A. 172 m  
 B. 516m  
 C. 384m  
 D. 412m

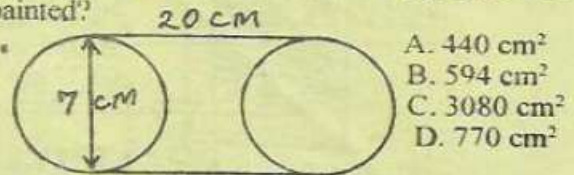
- Mr. Makau paid sh 1750 for a shirt after receiving a  $12\frac{1}{2}\%$  discount. What was the marked price of the shirt?  
 A. sh 250  
 B. sh 2187.50  
 C. sh 1850  
 D. sh 2000
- Ten pupils scored the following marks in an evaluation: 2, 5, 7, 6, 3, 9, 3, 8, 3 and 7 Calculate the sum of their mean and modal mark.  
 A. 5.3  
 B. 8  
 C. 8.3  
 D. 3
- The number of boys to girls in a class of 42 pupils is in the ratio of 3:4 respectively. On one day a third of the girls were absent, how many girls were present that day?  
 A. 16  
 B. 24  
 C. 18  
 D. 8
- Work out:  $\frac{0.2 + 0.6}{0.2 + 0.6} \div \frac{0.2}{0.6}$   
 A. 2.5  
 B. 5  
 C. 7.75  
 D. 4
- A hawker had the following coins in his cash box  
 25 coins of sh 10 each  
 30 coins of sh 20 each  
 20 coins of sh 40 each  
 40 coins of sh. 5 each  
 He decided to change all the coins into sh. 50 notes. How many notes did he receive?  
 A. 370  
 B. 37  
 C. 1850  
 D. 18
- A river which is 780km long is represented on a map by a line whose length is 15.6 cm. What is the scale used?  
 A. 1:500 000  
 B. 1:50,000  
 C. 1:5000,000  
 D. 1:5000
- A cylinder has a circumference of 88cm and a height of 15cm. What is it's volume?  
 A.  $9240 cm^3$   
 B.  $36960 cm^3$   
 C.  $2310 cm^3$   
 D.  $6310 cm^3$
- Simplify  $3(2x - 4y) + 5(3x + 2y)$   
 A.  $21x - 2y$   
 B.  $21x - 22y$   
 C.  $21x + 22y$   
 D.  $21x + 2y$
- Below are qualities of a quadrilateral  
 (i) the diagonals are equal  
 (ii) opposite sides are equal  
 (iii) opposite angles are equal  
 Which quadrilateral below has all the qualities above?  
 A. Parallelogram  
 B. Rhombus  
 C. Square  
 D. Trapezium

21. The area of the square on the hypotenuse of a right angled triangle is  $400\text{cm}^2$ . If one of the sides of the triangle is  $16\text{cm}$ , find the sides of the perimeter of the triangle?  
 A. 48 cm B. 30 cm  
 C. 37 cm D. 40 cm
22. Phoebe used 0.2 of her pocket money to buy snacks at break time on Monday. On Tuesday she used 0.25 of her pocket money as well. She used sh 45 more on Tuesday than on Monday. How much was she given as pocket money?  
 A. sh. 225 B. sh 750  
 C. sh 1200 D. sh 900
23. Construct a triangle TSR with  $TS = SR = 6\text{cm}$ , angle  $TSR = 75^\circ$ . Draw a circle to touch the sides of triangle. Measure its diameter.  
 A. 8 cm B. 3.6 cm C. 4 cm D. 1.8 cm
24. To construct a bridge in 90 days a company needs 120 men. How many more men are needed to complete the work in 40 days?  
 A. 150 B. 270 C. 53 D. 3
25. A cylindrical tank of diameter  $14\text{m}$  was  $\frac{1}{4}$  full of water. When  $46200$  litres of water was drawn from it, it became  $\frac{1}{3}$  full. What was the height of the tank?  
 A. 10 m B. 7 m C. 6 m D. 8 m
26. Mango joined college in the morning of Wednesday 29th January 2014. For how many nights was he in college if he came back on Friday 4th April 2014 morning?  
 A. 63 B. 64 C. 66 D. 65
27. The graph below shows journeys by a motorist and a cyclist from town A to town B.

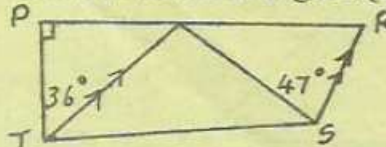


- How far from B was the cyclist when the motorist reached the destination?  
 A. 148 km B. 60 km  
 C. 52 km D. 140 km
28. What is the value of:  $\frac{2bc - a^2 - 3e^2}{3d + e}$   
 If  $a = c - d$ ,  $b = (2e)^2$ ,  $c = b + e$ ,  $d = \frac{1}{2}b$  and  $e = 1$   
 A. 7 B. 5  
 C. 4 D. 3

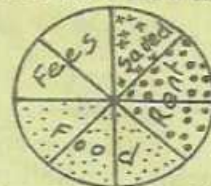
29. The following pipe was painted on its surface. Calculate the surface area of the pipe that was painted?



- A.  $440\text{ cm}^2$   
 B.  $594\text{ cm}^2$   
 C.  $3080\text{ cm}^2$   
 D.  $770\text{ cm}^2$
30. What is the value of:  
 $\frac{3}{4}(\frac{1}{2} + \frac{2}{5} \div \frac{1}{3}) - \frac{1}{2} \times \frac{3}{8}$   
 A.  $2\frac{7}{10}$  B.  $2\frac{1}{40}$  C.  $1\frac{1}{5}$  D.  $1\frac{9}{20}$
31. Otieno bought 100 oranges in piles of 5 at sh. 50 he spent sh 300 on transport and sh. 200 on lunch. On the way 20 oranges got spoilt. At what price should he sell each orange to make a profit of 20%?  
 A. sh 18 B. sh 20 C. sh 22.50 D. sh 12.50
32. Study the figure below. Line TQ is parallel to line SR. Angle  $PTO = 36^\circ$  and angle  $QSR = 47^\circ$ . What is the size of angle  $SQR$ ?  
 A.  $47^\circ$   
 B.  $107^\circ$   
 C.  $73^\circ$   
 D.  $79^\circ$

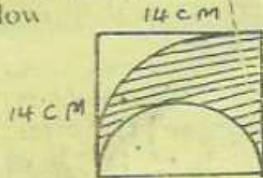


33. A boy retired to bed at 10.15 p.m on Monday. he slept for 7hrs 15 min. At what time did he wake up?  
 A. 5.30 p.m B. 1730 hrs  
 C. 0630 hrs D. 5.30 a.m
34. The pie chart below shows how Sammy used his salary of sh 20000. How much did he spend on food?



- A. sh 75000  
 B. sh 5000  
 C. sh 2500  
 D. sh 10000
35. Mr. Bahati walked for half an hour covering 10km. He then boarded a vehicle which travelled at  $60\text{km/h}$  for 20 minutes after resting for 10 minutes. Calculate his average speed for the whole journey.  
 A.  $70\text{km/h}$  B.  $60\text{ km}$  C.  $30\text{ km/h}$  D.  $25\text{ km/h}$
36. The following are properties of a triangle  
 (i) base angles are equal  
 (ii) two of its sides are equal  
 (iii) sum of angles is  $180^\circ$   
 The triangle described above is \_\_\_\_\_  
 A. Scalene triangle B. Right angled triangle  
 C. Equilateral triangle D. Isosceles triangle
37. A pick up loaded with ten bags of maize has a mass of 2.83 tonnes. If the empty pick up has mass of 2.23 tonnes. calculate the mass of each bag of maize in kilograms.  
 A. 600 B. 60 C. 0.06 D. 0.6

38. Calculate the area of the unshaded part of the figure below



- A.  $119 \text{ cm}^2$   
 B.  $154 \text{ cm}^2$   
 C.  $77 \text{ cm}^2$   
 D.  $196 \text{ cm}^2$

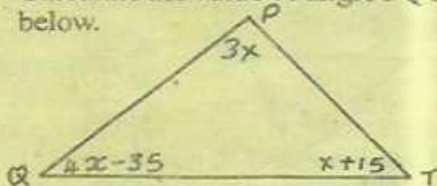
39. The price of a pencil is sh.  $p$  in a shop. A book costs sh 2 more than a pencil. How much will a customer pay for two pencils and a book?

- A. sh  $(2p + 2)$       B. sh  $(2p + 4)$   
 C. sh  $3p + 2$       D. sh  $(3p + 4)$

40. Joan donated sh. 48750 to a school, while Amina donated sh. 1850 more than what Joan donated. The amount donated by Christine was 2450 less than the three ladies altogether?

- A. sh 147500      B. sh 150550  
 C. sh 145650      D. sh 152400

41. Calculate the value of angle PQT in the figure below.



- A.  $75^\circ$   
 B.  $130^\circ$   
 C.  $40^\circ$   
 D.  $65^\circ$

42. The table below shows money order charges at the post office.

**INLAND MONEY ORDER**

Value of order	Ordinary	Express
Upto sh 500	sh. 42	sh. 80
501 - 1000	sh 155	sh 173
1001 - 3000	sh 184	sh 203
3001 - 5000	sh 220	sh 240
50001 - 10000	sh 304	sh 318
10001 - 20000	sh. 435	sh 455
20002 - 30000	sh 620	sh 680

Mrs. Kongere sent an ordinary money order of sh 12400 to her daughter in Kitale plus an express money order worth sh. 9500 to her son in Kisumu. How much did she pay at the post office?

- A. sh 22653      B. sh 22659  
 C. sh 21900      D. sh 22838

43. A salesman is paid a basic salary of sh. 7500 per month. He is also paid a commission of 3% on all goods he sells each month. During a certain month he sold the following items:

- 2 television sets at sh 21500
- 3 sets of lighting system at sh 3500
- 4 generators at sh 35000

What was his total earning that month?

- A. sh 5805      B. sh 12505  
 C. sh 6030      D. sh 13305

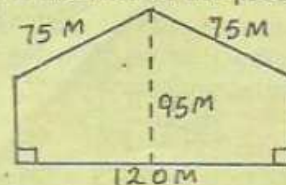
44. What is the sum of the next two number in the sequence below. 1, 2, 3, 5, 8

- A. 21      B. 34      C. 39      D. 18

45. The hire purchase price of a radio is 130% of the cash price. Luke brought the radio on hire purchase by paying a deposit of sh 8500 plus 10 monthly instalments of sh 1880 each. What was the cash price of the radio?

- A. sh 18600      B. sh 27300  
 C. sh 21000      D. sh 24000

46. What is the area of the piece of land below in ares?



- A. 87  
 B. 6000  
 C. 8700  
 D. 4360

47. Yvonne spent  $\frac{1}{3}$  of her pocket money on transport,  $\frac{3}{4}$  of the remainder on books and the remaining amount on loaves of bread. What fraction does she use on loaves of bread?

- A.  $\frac{5}{6}$       B.  $\frac{1}{2}$       C.  $\frac{1}{4}$       D.  $\frac{1}{6}$

48. The table below shows a matatu fare table in shillings from Mumias to Busia. A matatu carried 18 passengers from Mumias. Six alighted at Munami and 5 boarded at Nambale. How much was collected from Mumias to Busia?

Mumias	Koyonzo	Munami	Nambale	Korinda	Busia
30					
60	50				
150	100	80			
200	150	100	80		
240	200	200	100	40	

- A. sh 4080      B. sh 3740  
 C. sh 3880      D. sh 4320

49. A teacher deposited sh 30000 in a bank which paid a simple interest at the rate of 15% p.a. How much money did he have in the bank after 18 months?

- A. sh 6750      B. sh 81000  
 C. sh 19000      D. sh 36750

50. What is the next shape in the pattern below?

