

Standard 8 End Term 1 Exam, 2016

MATHEMATICS

TIME: 2HRS.

READ THE INSTRUCTIONS CAREFULLY

HOW TO USE THE ANSWER SHEET

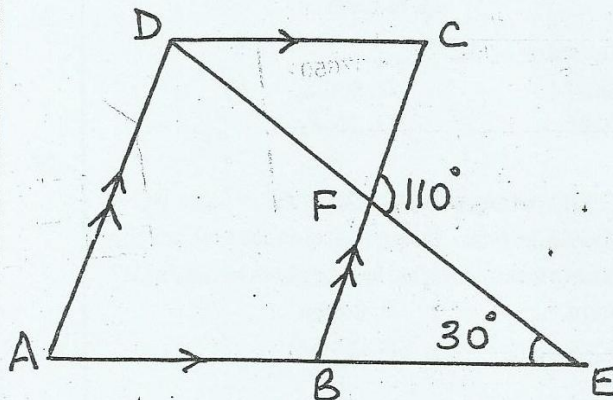
1. You have been given this question booklet and a separate ANSWER SHEET. The question booklet contains 90 questions.
2. Do any necessary rough work in this booklet.
3. Use only an ordinary pencil.

1. YOUR NAME

2. NAME OF YOUR SCHOOL

3. YOUR INDEX NUMBER

1. Write five million fifteen thousand and fifty in symbols?
A. 5015015 B. 5015050
C. 5015500 D. 5000015
2. What is the place value of digit 1 after working out 3.97×1.34 ?
A. Tenths B. Tens
C. Hundreths D. Thousands
3. What is the least number that can be added to the number 37385 to make it divisible by 11?
A. 3 B. 1
C. 2 D. 4
4. Work out: $\frac{1}{3}$ of $5\frac{1}{4} - 5\frac{1}{2} \div 4\frac{2}{5}$
A. $\frac{1}{2}$ B. $10\frac{1}{2}$
C. 2 D. $1\frac{1}{4}$
5. What is the total value of digit 2 in 2547651?
A. million B. two hundred thousands
C. two million D. 200000
6. What is the value of x in the equation $5x + 2(x + 1) = 4$
A. $\frac{3}{7}$ B. $\frac{2}{7}$
C. $\frac{6}{7}$ D. 1
7. A string 1.5m long was cut from a string measuring 7.5m. What percentage of the string was left?
A. 20% B. 25%
C. 80% D. $83\frac{1}{3}\%$
8. Work out: $\frac{0.36 \times 0.12}{0.096}$
A. 45 B. 4.5
C. 450 D. 0.45
9. A motorist took 3 hours to travel 216km. At what speed was the motorist driving in km/h?
A. 72km/h B. 720km
C. 678km/h D. 56km/h
10. What is the next number in the series $2\frac{1}{4}, 2\frac{2}{9}, 2\frac{3}{16}, \dots$
A. $2\frac{4}{25}$ B. $2\frac{1}{5}$
C. $2\frac{4}{20}$ D. $2\frac{1}{6}$
11. Three bells are rung at intervals of 24 min 30 min and 36 min. If they are rung together at 9.10am at what time had they rung before?
A. 9.16am B. 3.10pm
C. 10.40pm D. 3.10am
12. Find the difference in the mean and the median of the following 4, 5, 6, 7, 5, 9, 5, 8, 5
A. 6 B. 11
C. 1 D. 0
13. The figure ABCD shown below is a parallelogram line ABE is a straight line. Angle BEF = 30° and angle EFC is 110°



What is the size of angle EDA?

- A. 140° B. 40°
 C. 30° D. 110°

14. Mutua spent half of his salary on rent and $\frac{1}{3}$ of the remainder on food. If he saved Shs. 6000. How much was his salary?

- A. Sh. 3600 B. Sh. 18000
 C. Sh. 12000 D. Sh. 15000

15. Susan has sheep and goats in the ratio 3 : 4 if she has 20 goats. How many animals does she have altogether?

- A. 35 B. 28
 C. 140 D. 60

16. Abdi bought a camera and later sold it for Shs. 6300 making a loss of 30%. At what price had he bought the camera?

- A. Sh. 6300 B. Sh. 9000
 C. Sh. 4410 D. Sh. 8190

17. Adhiambo bought the following items from a shop

2 loaves of bread @ Sh. 46

$1\frac{1}{2}$ kg of meat @ Shs. 420

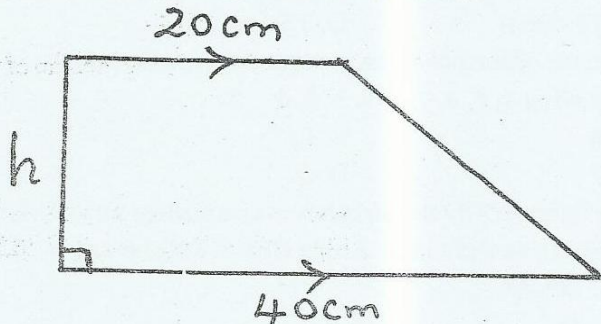
2 packets of unga for Sh. 220

500g of tea leaves @ Sh. 250 per kg.

How much did she pay for the items?

- A. Sh. 1192 B. Sh. 857
 C. Sh. 926 D. Sh. 1067

18. The area of the diagram below is 450cm^2



Find the value of H.

- A. 15cm B. 30cm
 C. $11\frac{1}{4}$ cm D. 20cm

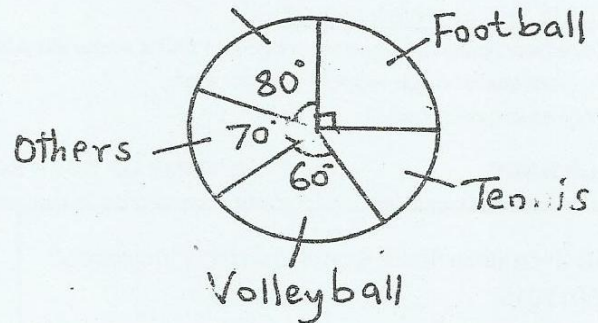
19. Construct a triangle ABC where $AB = 7\text{cm}$ $BC = 8\text{cm}$ and $AC = 8\text{cm}$. Draw a circle that touches the vertices of a triangle. What is the radius of the circle?

- A. 4.4cm B. 8.8cm
 C. 3.4cm D. 2.4cm

20. Njoroge bought an item on hire purchase by giving a deposit of Sh. 4400 and paid the rest in equal monthly installments of Sh. 1200 for $\frac{2}{3}$ years. How much did he pay?

- A. Sh. 5500 B. Sh. 5200
 C. Sh. 14000 D. Sh. 9600

21. The pie chart below shows how 180 pupils like the games



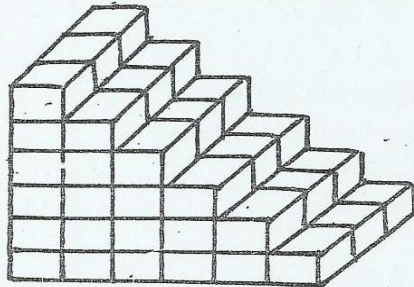
How many more pupils like football than tennis?

- A. 45 B. 30
 C. 15 D. 20

22. Maureen had w mangoes Stacy had two more mangoes than Maureen. Winnie had five less than the total number that Maureen and Stacy had. How many mangoes did they have altogether?

- A. $4w - 9$ B. $4w - 1$
 C. $6w - 4$ D. $4w + 1$

23. How many cubes make the stack below



- A. 21
 B. 70
 C. 39
 D. 63

24. Work out $0.48 \div 2.3$ and round off your answer to 1 decimal place.

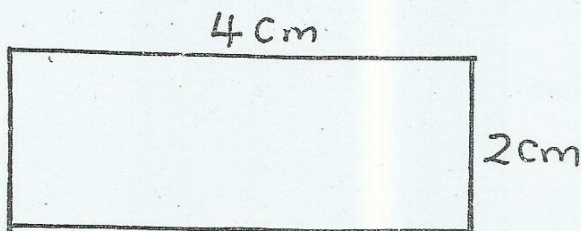
- A. 0.2 B. 0.2
 C. 0.4 D. 0.0

25. Mrs. Mutua borrowed Shs. 36000 in bank that was giving a simple interest at the rate of $2\frac{1}{2}\%$ p.a. How much more did she get after 9 months?

- A. Sh. 675 B. Sh. 1350
 C. Sh. 8100 D. Sh. 16200

26. What is the next number in the series
1, 1, 2, 3, 5, 8, 13, _____
A. 20 B. 17
C. 21 D. 25
27. If $x = w + 1$; $y = x + 1$ and $w = 2$. What is the value of
$$\frac{2xy + 2xw^2}{wxy}$$

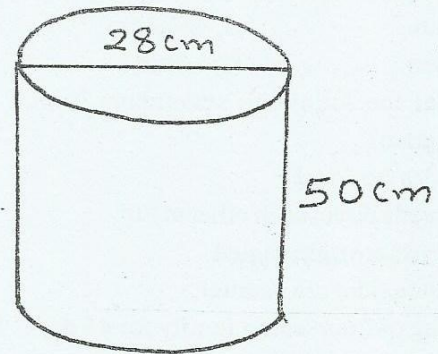
A. $1\frac{1}{2}$ B. 3
C. 2 D. 1
28. Mr. Wafaa's square garden was fenced using 3 strands of wire. If its area is 4 hectares. Calculate the length of the wire.
A. 800m B. 200m
C. 1600m D. 2400m
29. A cuboid has a length of 2m width of 80cm and a height of 1.5m. How many litres can it hold when full?
A. 2400 000L B. 2.4L
C. 2400L D. 24L
30. Nancy bought a tray of eggs at Sh. 300. On the way home 6 eggs got broken and sold the rest at Shs. 12 each. What was her percentage loss?
A. 20% B. 4%
C. 8% D. 12%
31. The diagram below represent Mr. Ben's farm. Drawn to scale 1:2000



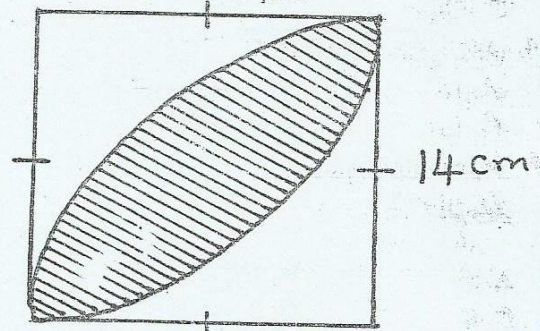
Find the area in Ares

- A. 32 B. 3200
C. 0.32 D. 800
32. At a certain primary school $\frac{7}{12}$ of all the children are boys. What is the ratio of boys to girls at that school?
A. 7:5 B. 1:1
C. 60:84 D. 5:7
33. A trader bought 5 tonnes of sugar and packed it into 500 grammes packets. How many packets did he get?
A. 10000 B. 1000
C. 100000 D. 100

34. The figure below is an open cylinder. Find its surface area

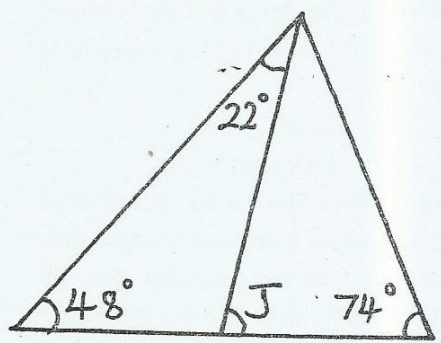


- A. 30 800cm² B. 5632cm²
C. 5016cm² D. 440cm²
35. Mary is twice as old as her brother Tom who is 5 years older than Jane. If the sum of their ages is 31 years. How old is Jane?
A. 18 yrs B. $6\frac{1}{2}$ yrs
C. 4 yrs D. 9 yrs
36. The telegram charges were Shs. 15.50. For the first ten words. Every additional word was charged Shs. 2.40. The total amount was then rounded up to the nearest fifty cents. Mwangangi sent the following telegram.
JOHN KIBUTU BOX 639 MATUU VICIT NUNGWA BOARDING SCHOOL NAIROBI FIRST SUNDAY MARCH MWANGANGIANN
How much did she pay for the telegram?
A. Sh. 15.50 B. Sh. 12.00
C. Sh. 27.50 D. Sh. 28.00
37. Find the area of the shaded part



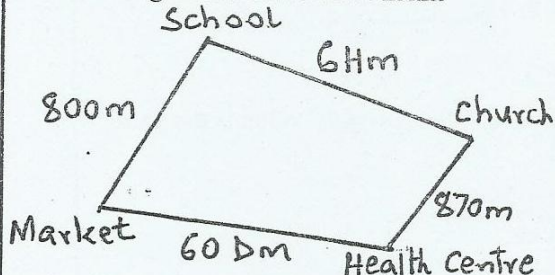
- A. 92cm² B. 56cm²
C. 112cm² D. 154cm²
38. What is 0.004 as a percentage?
A. 4% B. 40%
C. 0.4% D. 0.04%

39. A wheel has a radius of 2.8m. How many kilometres will the wheel cover after 50 revolution?
 A. 0.88km B. 4.928km
 C. 0.44km D. 4.4km
40. Which of the following statements is true on a parallelogram?
 A. All sides are equal
 B. Diagonals bisect each other at 90°
 C. All angles are right angled
 D. Opposite sides are parallel
41. $\frac{5}{8}$ of a bag of flour lasts a family for 45 days. How many more days will $\frac{2}{3}$ of it last?
 A. 48 days B. 3 days
 C. 5 days D. 10 days
42. What is the value of angle marked J in the figure below



- A. 36° B. 22°
 C. 70° D. 16°
43. The mean mass of 3 boys is 48kg. The masses of seven boys are 49kg, 46kg, 51kg, 40kg, 52kg, 45kg and 50kg. What is the median of their masses?
 A. 49kg B. 49.5kg
 C. 48kg D. 51kg
44. Work out: $\sqrt{0.0064 \times 0.2}$
 A. 16 B. 0.16
 C. 1.6 D. 0.016
45. What is the value of x in $\frac{2x-1}{6} + \frac{x}{3} = 1$
 A. 3 B. $1\frac{3}{4}$
 C. 6 D. 0
46. The temperature reading on the thermometer is 3°C . The temperature rose at the average rate of 0.15°C per second. What was the temperature after 4 minutes?
 A. 36°C B. 33°C
 C. 39°C D. 30°C

47. Calculate the distance from the Church to the School through the Health Centre in km



- A. 12.87
 B. 2.27
 C. 2270
 D. 227

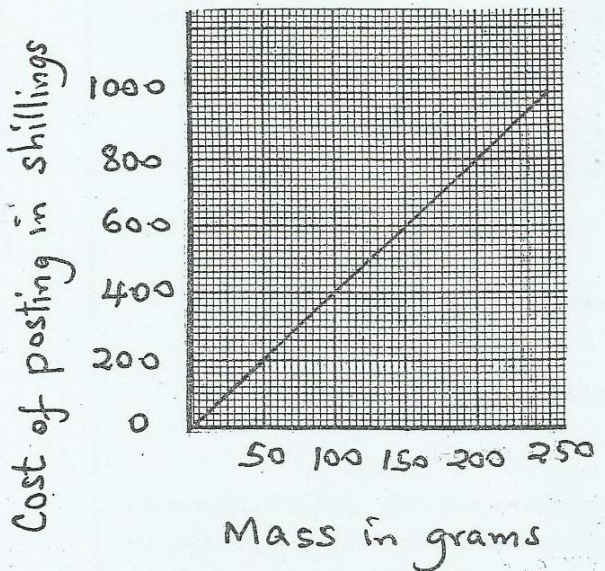
48. The surface area of a closed cube is 96cm^2 . What is the volume of the cube?
 A. 16cm^3 B. 64cm^3
 C. 216cm^3 D. 32cm^3

49. The table below shows Salims scores in an opener exam

Subject	Maths	Eng	Kisw	Scie	SST
Score out of 20	18	18	14	10	20

- If a pie chart was to be drawn, what would be the size of the angle representing Maths?
 A. 18° B. 40°
 C. 80° D. 81°

The graph below is about sending parcels



50. Nekesa sent parcels weighing 25g, 100g and 225g. He paid with three five hundred shillings notes. What was the balance in shillings?
 A. 1400 B. 350
 C. 100 D. 1500