

BUTERE MUMIAS EVALUATION PAPER

STD 8 TERM II-2020

MATHEMATICS



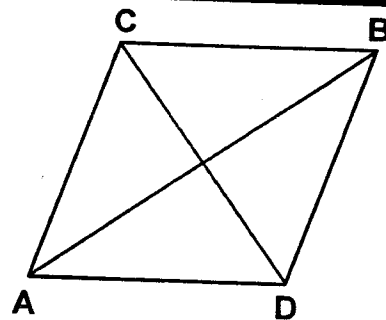
- You have been given this question booklet and a separate answer sheet. This question booklet contains 50 questions.
- Do any necessary rough work in this booklet.
- When you have chosen your answer, mark it on the ANSWER SHEET, not in this question booklet.
- Use only an ordinary pencil.
- Make sure that you have written on the answer sheet:

HOW TO USE THE ANSWER SHEET

YOUR INDEX NUMBER
YOUR NAME
NAME OF YOUR SCHOOL

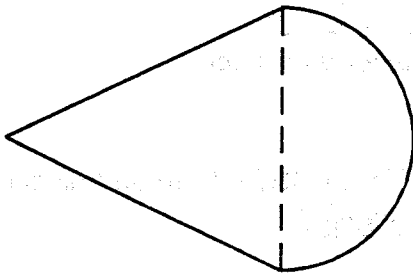
Time: 2hrs

- Write one of the following in ninety million eight hundred and eighty eight thousand four hundred and eighty nine in symbols.
 A. 90880480 B. 90888489
 C. 90889489 D. 90898489
- How many times is the total value of digit 8 more than the total value of digit 2 in the number 784926?
 A. 79980 B. 799980
 C. 4000 D. 40000
- What is 6999.9986 rounded off to the nearest hundredths?
 A. 6999.99 B. 6999.00
 C. 7000.00 D. 7000
- What is the sum of the L.C.M and H.C.F of the numbers 54, 72 and 90?
 A. 1080 B. 1062
 C. 1098 D. 60
- A shopekeeper bought two crates of soda each containing 24 bottles. He then sold each bottle of soda at sh.30 making a 20% profit. How much had he paid for the crates of soda?
 A. Sh.1440 B. Sh.1200
 C. Sh.25 D. Sh.50
- After a decrease of sh.500 Peter's salary became sh.4500. What was the percentage decrease?
 A. 10% B. 11.11%
 C. 15% D. 11%
- What is $\frac{2}{5}$ of $(\frac{1}{2} - \frac{1}{3}) \div \frac{4}{9}$?
 A. $1\frac{1}{15}$ B. $6\frac{2}{3}$
 C. $\frac{4}{135}$ D. $\frac{3}{20}$
- In the figure below CD and AB are diagonal measuring 6cm and 8cm respectively. Find its area.

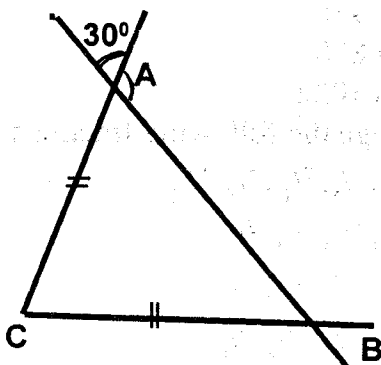


- 25cm²
 - 6cm²
 - 24cm²
 - 20cm²
- Martin paid sh.7200 for eight shirts after getting a discount of 10%. What was the marked price of each shirt?
 A. Sh.1000 B. Sh.810
 C. Sh.8000 D. Sh.9000
- Nancy bought the following items from the shop.
 $2\frac{1}{2}$ kg of sugar @ sh.120
 3kg of rice @ sh.100
 $1\frac{1}{2}$ kg of cooking oil for sh.180
 3 loaves of bread @ sh.90
 2 exercise books for sh.72
 If she paid for the items above using two-one thousand shilling notes, how much balance did she receive?
 A. Sh.1122
 B. Sh.978
 C. Sh.878
 D. Sh.1022
- Arrange the following fractions in ascending order: $\frac{3}{8}, \frac{2}{11}, \frac{5}{6}, \frac{6}{13}$
 A. $\frac{5}{6}, \frac{6}{13}, \frac{3}{8}, \frac{2}{11}$
 B. $\frac{2}{11}, \frac{3}{8}, \frac{6}{13}, \frac{5}{6}$
 C. $\frac{6}{13}, \frac{2}{11}, \frac{3}{8}, \frac{5}{6}$
 D. $\frac{5}{6}, \frac{3}{8}, \frac{2}{11}, \frac{6}{13}$

12. The graph below is made up of a semi-circle and an equilateral triangle of side 14cm. What is half its perimeter?



- A. 50cm
B. 64cm
C. 25cm
D. 32cm
13. George rode from home to school at a speed of 15km/h. He then rode back at a speed of 9km/h taking a total of 8 hours. Find the distance between his home and school.
A. 24km
B. 90km
C. 48km
D. 45km
14. The area of a square card is $1\frac{11}{25}m^2$. Find its perimeter.
A. $2\frac{4}{25}m$
B. $4\frac{4}{5}m$
C. $11\frac{5}{6}m$
D. $1\frac{1}{5}m$
15. The mean mass of eight girls is 44kg. The mass of seven of them are 45kg, 46kg, 45kg, 48kg, 43kg, 38kg and 45kg. Find their modal mass.
A. 38kg
B. 42kg
C. 90kg
D. 45kg
16. Find the next number in the sequence below. 1, 1, 2, 3, 5, 8, _____
A. 14
B. 13
C. 16
D. 15
17. In an election there were three candidates X, Y and Z. Candidate X got 2175 votes, Y got 1002 votes less than Z who got 1500 votes more than X. 720 votes were spoilt. How many votes were cast?
A. 5497
B. 9243
C. 8523
D. 7803
18. What is a quarter of angle ACB?



- A. 30°
B. 120°
C. 40°
D. 60°
19. Wamboi borrowed sh.90000 from a bank which charged a simple interest at the rate of 12% p.a. How much money did she pay back after 8 months?
A. Sh.7200
B. Sh.97200
C. Sh.86400
D. Sh.176400
20. Express 0.037 as a percentage.
A. 37%
B. 0.37%
C. $\frac{37}{1000}\%$
D. 3.7%
21. What is the square root of:
 $\sqrt{\frac{16}{81}}$
A. $\frac{4}{9}$
B. $\frac{8}{9}$
C. $2\frac{1}{4}$
D. $\frac{2}{3}$
22. What is the place value of digit 2 in the product of 7.98 and 6.9?
A. Ones
B. Tens
C. Thousandths
D. Hundredths
23. Work out: $\frac{4.5 \times 15.21}{0.225 \times 169}$
A. 1.8
B. 18
C. 180
D. 0.18
24. A river is represented on a map using a scale of 1:2500. What will be the drawing length of a river 5km on the map?
A. 200m
B. 20000cm
C. 2m
D. 20cm
25. What is the capacity of a rectangular container measuring 0.2m by 0.5m by 0.7m in litres?
A. 7000 litres
B. 7 litres
C. 700 litres
D. 70 litres
26. The length and width of a rectangle are 20cm and 15cm respectively. The measurements are increased by 20%. What is the area of the rectangle?
A. $432cm^2$
B. $300cm^2$
C. $132cm^2$
D. $180cm^2$
27. Oduor made a loss of 20% after selling a pullover for sh.1200. Calculate his buying price.
A. Sh.1220
B. Sh.960
C. Sh.1500
D. Sh.1440
28. What is the smallest number that must be subtracted from 376234 to make it divisible by 11?
A. 1
B. 2
C. 3
D. 4
29. Work out:
 $\sqrt{0.2304}$

- A. 4.8 B. 0.48
C. 48 D. 0.048

30. Construct triangle RST such that line ST=8.5cm, angle RST=50° and angle SRT=70°. What is the measure of line RS?

- A. 7cm B. 8.5cm
C. 7.8cm D. 8.9cm

31. The following are properties of a quadrilateral.

- (a) All sides are equal
(b) All angles are right angles
(c) Diagonals meet at right angles
(d) Opposite angles are equal

Which of the above properties does not apply to a rhombus?

- A. (d) B. (c)
C. (a) D. (b)

32. The top of a ladder 25 metres long leans on a vertical wall. The ladder touches the wall to a height of 15 metres. What is the horizontal distance in metres from the bottom of the ladder to the wall?

- A. 10m B. 20m
C. 24m D. 40m

33. What is the value of w in the equation:

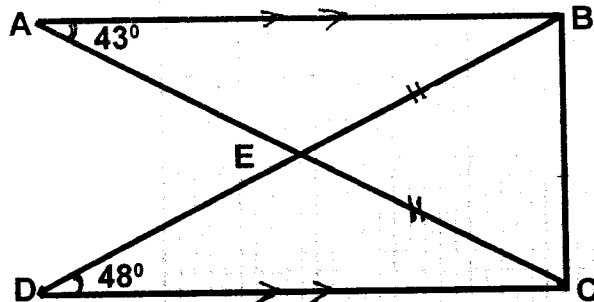
$$\frac{3w - 1}{5} = \frac{2w - 4}{3}$$

- A. 25 B. 15
C. 5 D. 4

34. The area of the curved surface of a cylinder is 5544cm². If the height is 42cm. What is the radius of the cylinder? (Take $\pi = \frac{22}{7}$)

- A. 6cm B. 21cm
C. 18cm D. 36cm

35. In the figure below line AB is parallel to line DC, line AEC and BED are straight lines while line BE=EC. Angle BAC=43° and angle BDC=48°.



What is the size of angle DEC?

- A. 89° B. 91°
C. 86° D. 96°

36. In the year 2016, March 11th was a Friday. What day was 16th June the same year?

- A. Friday B. Thursday
C. Wednesday D. Saturday

37. A bicycle wheel has a radius of 21cm. How many revolutions will it make to cover a distance of 11.88km?

- A. 9000 B. 900
C. 6000 D. 600

38. The table below shows the arrival time and departure time for a bus at different stations.

Station	Arrival	Departure
Kisumu	_____	7.00am
Kericho	8.30am	9.00am
Nakuru	11.30am	12.30pm
Gilgil	1.20pm	1.40pm
Naivasha	2.40pm	3.00pm
Nairobi	4.30pm	_____

How long did the bus take from Kericho to Naivasha?

- A. 5hrs 50mins B. 6 hours
C. 5hrs 40mins D. 6hrs 10mins

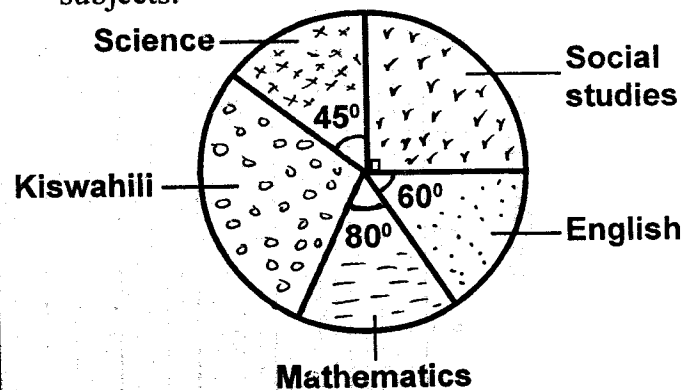
39. A bus left Nairobi at 8.00am. It covered a distance of 180km. If it arrived at 10.00am, what was its speed in metres per second?

- A. 180m/s B. 90m/s
C. 50m/s D. 25m/s

40. Kamau harvested 0.42 tonnes of beans one season. He kept 120kg for family use and sold the rest in 50kg bags. How many bags did he sell?

- A. 8 B. 7
C. 9 D. 6

41. The pie-chart below shows how pupils in Mathare Primary chose their favourite subjects.



If 765 pupils chose Kiswahili, how many pupils chose Mathematics?

- A. 760 B. 720
C. 540 D. 405

42. Three girls Wambui, Wanjiru and Mercy did a test. Wanjiru had 8 marks less than Mercy while Wambui had 19 more marks than Wanjiru. If Mercy had w marks, find the total marks they all had?

- A. $3w - 3$
- C. $3w + 3$

- B. $3w + 11$
- D. $3w - 11$

43. The sides of a triangle are in the ratio 3:4:6. If the longest side is 18cm, what is the perimeter of the triangle?

- A. 13cm
- B. 39cm
- C. 31cm
- D. 78cm

44. Construct a triangle ABC where $AB=BC=4$ cm. Draw a circle that touches the three vertices of the triangle. What is the diameter of the circle?

- A. 2.6cm
- B. 1.3cm
- C. 4.6cm
- D. 2.3cm

45. What is the value of:

$$\frac{2z^2 - 2(x - y)}{x - y}$$

if $z = y + 5$, $x = \frac{1}{2}z$ and $y = 3$

- A. 64
- B. 128
- C. 126
- D. 32

46. A car was sold at sh.100000 through a dealer. The dealer charged the owner a 10% commission on the selling price. How much did the owner get?

- A. Sh.10000
- C. Sh.90000

- B. Sh.110000
- D. Sh.80000

47. Kazungu bought a radio on hire purchase terms. He paid a deposit of sh.900 and 9 equal monthly instalments of sh.300. The hire purchase price was 20% more than the marked price. What was the marked price of the radio?

- A. Sh.3500
- C. Sh.600
- B. Sh.3000
- D. Sh.1200

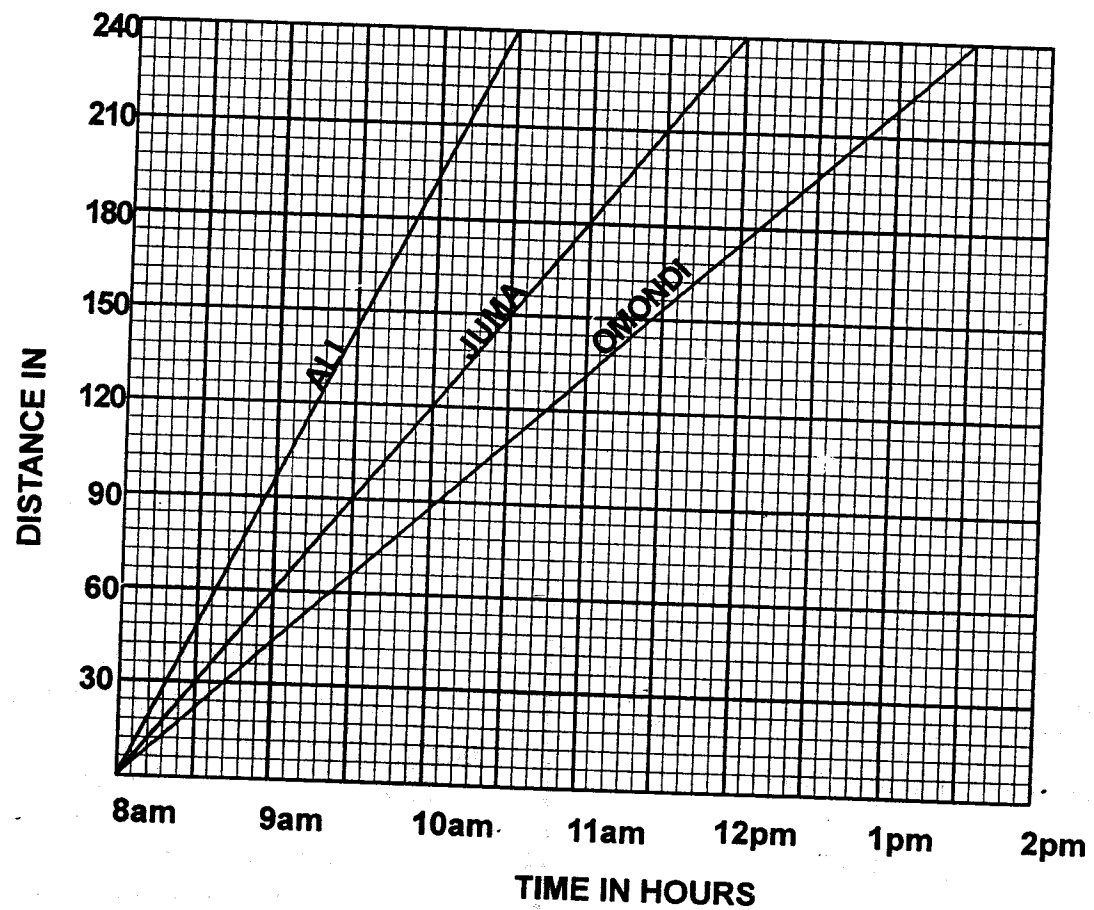
48. Ten identical taps can fill a tank of water in 8 minutes. How many more taps would be needed to fill the same tap in 5 minutes?

- A. 16
- C. 8
- B. 6
- D. 5

49. Rotich shared money among his three children. The first got $\frac{1}{3}$ while the second got $\frac{1}{4}$ of the money. The third got $\frac{1}{2}$ of what remained. Rotich was left with sh.3000. How much money had he before it was shared?

- A. Sh.72000
- C. Sh.36000
- B. Sh.14400
- D. Sh.108000

The graph below shows the journey made by the three motorists Ali, Juma and Omondi. Use it to answer question 50.



50. Among the three motorists, who is the fastest?

- A. Ali
- B. Juma
- C. Omondi
- D. None