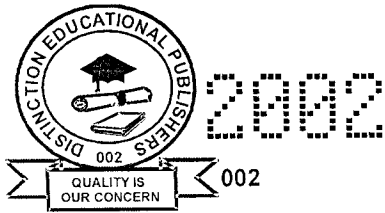


DISTINCTION KCPE CONQUEROR



STANDARD EIGHT
SECOND PREDICTION - 2020

8

CONQUEROR

TIME: 2 HRS

MATHEMATICS

READ THESE INSTRUCTIONS CAREFULLY

1. You have been given this question booklet and a separate answer sheet. The question paper 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 an ordinary pencil only.
5. Make sure you have written on the answer sheet.
YOUR INDEX NUMBER
YOUR NAME
NAME OF YOUR SCHOOL
6. By drawing a dark line inside the correct numbered boxes mark your full Index Number (i.e. School Code Number and the three-figure Candidate's Number) in the grid near the top of the answer sheet.
7. Do not make any marks outside the brackets [].
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 the correct answer is to be shown by drawing a dark line inside the box in which the letter you have chosen is written.

Example:-

In the question paper.

4. Change three thousand hectometres into kilometres

- A. 3
- B. 300
- C. 30
- D. 0.3

The correct answer is **B. (300)**.

On the answer sheet

4. [A] [B] [C] [D] **14.** [A] [B] [C] [D] **24.** [A] [B] [C] [D] **34.** [A] [B] [C] [D]

In the first set, the box with the letter **B** printed in it is marked.



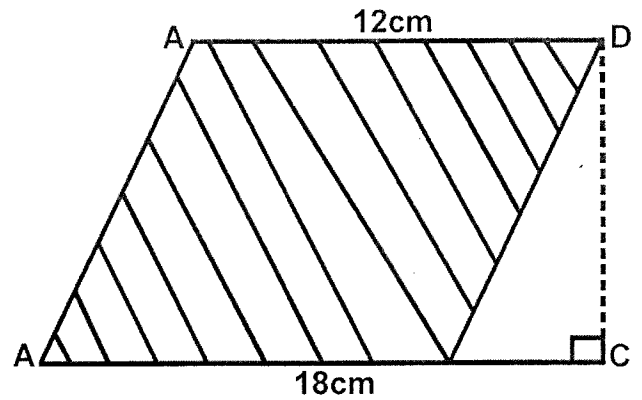
11. Your dark line **MUST** be within the brackets.
12. For each question **ONLY ONE** bracket is to be marked in each of four brackets.

This question paper consists of 8 printed pages.



- Write **30030030** in words.
 - Three million thirty thousand and thirty.
 - Thirty million thirty thousand and thirty.
 - Three hundred million thirty thousand and thirty.
 - Three million thirty thousand and thirty.
- What is the place value of digit **5** after working out the product of **0.305** and **5.20**?
 - Ones
 - Hundredths
 - Thousandths
 - Tenths
- Round off **537965** to the nearest ten thousands.
 - 540000
 - 530000
 - 538000
 - 500000
- What is the least number that can be added to **369454** to make it divisible by **11**?
 - 1
 - 2
 - 3
 - 4
- Calculate the difference between the total value of digit **1** and the total value of digit **7** in the number **379142**.
 - 6990
 - 69900
 - 7900
 - 69000

- The area of the shaded figure is **96cm²**.



What is the length of line DC?

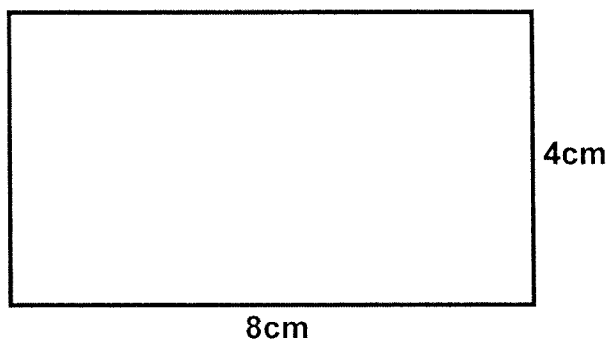
- 10cm
 - 20cm
 - 8cm
 - 16cm
- A customer paid **Shs. 3000** for an item after receiving a discount of **25%**. What was its market price?
 - Shs. 3750
 - Shs. 2250
 - Shs. 3600
 - Shs. 4000
 - A flour miller packs **3000 - 2kg** and **2000 - 1kg** packets of flour each day. How many tonnes of flour do they pack in two days?
 - 0.8
 - 8
 - 16
 - 1.6
 - Work out: $4 \times 288 \div 12 - 50 + 12$
 - 12
 - 8
 - 58
 - 6

10. What is the next number in the pattern;

30, 66, 115, 179, _____?

- A. 160
- B. 240
- C. 250
- D. 260

11. The rectangle below is drawn using the scale **1:2500**. What is its actual area in hectares?



- A. 2
- B. 20
- C. 32
- D. 3.2

12. What is the value of:

$$7 - 3\frac{1}{5} - 1\frac{1}{4}?$$

- A. $4\frac{11}{20}$
- B. $5\frac{19}{20}$
- C. $2\frac{3}{20}$
- D. $2\frac{11}{20}$

13. A tank was full of water. After **4000L** was drawn it became $\frac{3}{8}$ full. Find the capacity of the tank when full.

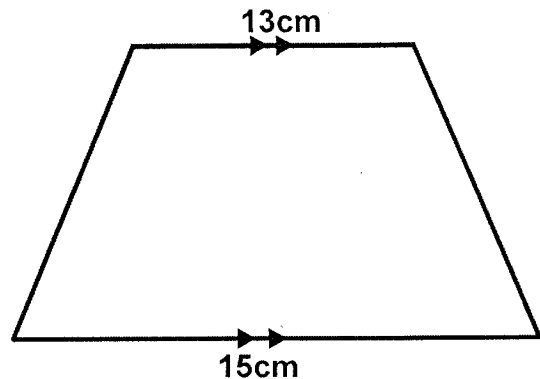
- A. 6400L
- B. 20000L
- C. 16000L
- D. 15000L

14. Solve the following equation.

$$6(y + \frac{1}{3}) + \frac{1}{3}(15 - 9y) = 28$$

- A. $y = 3$
- B. $y = 7$
- C. $y = 1\frac{10}{11}$
- D. $y = 3\frac{3}{11}$

15. The area of the trapezium drawing below is **126cm²**.



What is the perpendicular distance between the two parallel sides?

- A. 18cm
- B. 16cm
- C. 9cm
- D. 8cm

16. A bank charges simple interest at a rate of **12% p.a.** Auma borrowed **Shs. 20000** from the bank to pay back in **18 months**. How much did she pay altogether?

- A. Shs. 3600
- B. Shs. 23600
- C. Shs. 43200
- D. Shs. 63200

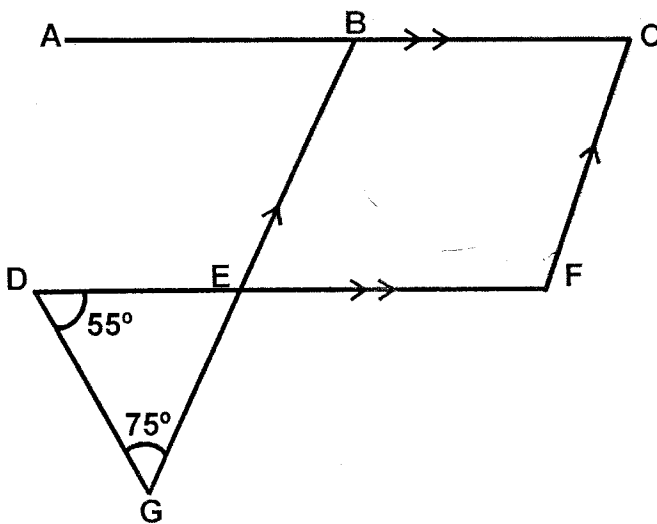
17. A meeting started at **0915 hrs**. The first session took **2 hrs 40 mins**. There was a **50 minutes** break followed by a second session which took **1 $\frac{2}{3}$ hrs**. At what time did the second session end?

- A. 2:30 p.m
- B. 1:45 p.m
- C. 1:40 p.m
- D. 2:25 p.m

18. The diameter of a cylindrical tank is **2.8m**. Its height is **4.0m**. It was three fifth full of water. How many more litres would be added in order to make it full of water?
- A. 704L
 B. 9856L
 C. 4928L
 D. 24640?

19. Work out: $\sqrt{0.5625}$
- A. 75
 B. 7.5
 C. 0.65
 D. 0.75

20. In the figure below **BEFC** is a parallelogram. Line **ABC** and **DEF** are parallel. Angle **EDG = 55°** and **DGE = 75°**.



What is the size of angle **BCF**?

- A. 130°
 B. 55°
 C. 50°
 D. 75°

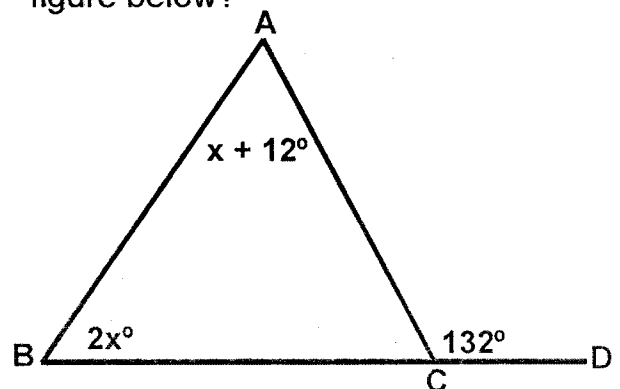
21. How many bars of soap measuring **10cm** by **10cm** by **20cm** can fill in a carton measuring **80cm** by **40cm** by **1m** high.
- A. 30
 B. 300
 C. 15
 D. 160

22. Work out: $3.25 - 4.28 + 8.23$

0.08

- A. 90
 B. 9
 C. 0.9
 D. 0.09
23. **24** women can complete weeding a farm in **21** days. How many more days would **18** women working at the same rate take to weed the same farm?
- A. 28
 B. 7
 C. 6
 D. 8

24. What is the value of angle **BAC** in the figure below?



- A. 40°
 B. 80°
 C. 52°
 D. 48°

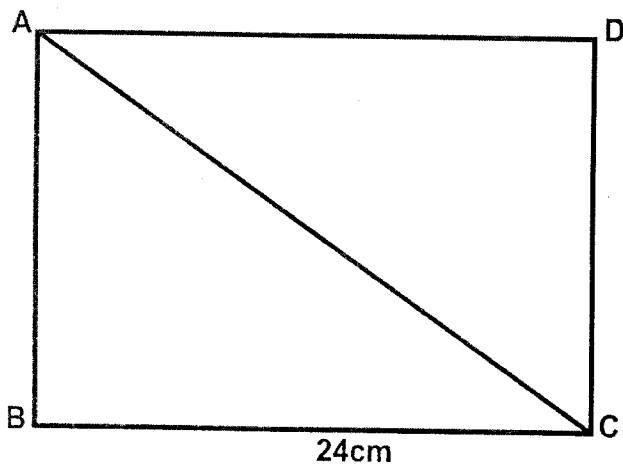
25. The mean age of 5 class 8 boys is 24 years. The mean age of the 5 boys and their class teacher is 28 years. How old is their teacher?

- A. 20 years
- B. 48 years
- C. 44 years
- D. 42 years

26. A businessman made a loss of Shs. 240 by selling a bag for Shs. 960. What was the percentage loss?

- A. 25%
- B. $33\frac{1}{3}\%$
- C. 20%
- D. 33%

27. The area of rectangle ABCD in the figure below is 240cm^2 .



What is the length of line AC?

- A. 10cm
- B. 25cm
- C. 20cm
- D. 26cm

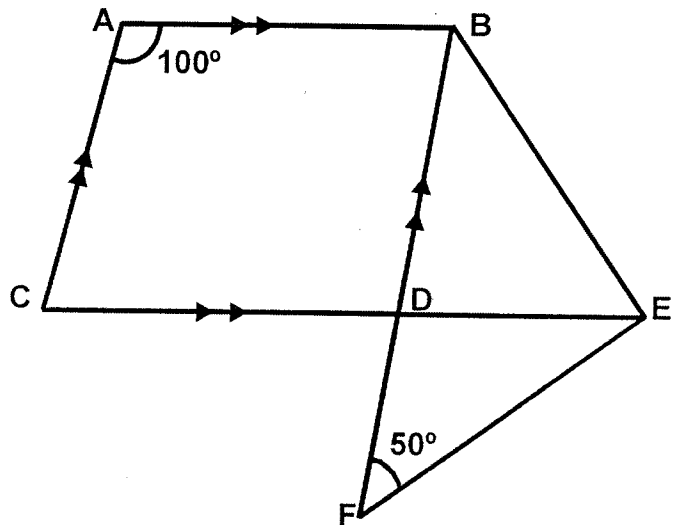
28. A plane took $\frac{1}{2}$ hour to travel from Nairobi to Mombasa. If it was travelling at a speed of 200m/s . What is the distance between Nairobi and Mombasa?

- A. 540km
- B. 440km
- C. 360km
- D. 720km

29. Atoyo is x years old. He is 6 years younger than Mandi. Pendo is 2 years older than Atoyo. Write an expression to represent the sum of the ages of the three people.

- A. $(3x + 8)$ yrs
- B. $(3x + 4)$ yrs
- C. $(3x - 8)$ yrs
- D. $(3x - 4)$ yrs

30. In the figure below line CA is parallel to line FDB. Line AB is parallel to CD. CDE is a straight line. Angle $CAB = 100^\circ$ and angle $DFE = 50^\circ$.



What is the size of angle DEF?

- A. 30°
- B. 35°
- C. 55°
- D. 80°

31. A man bought the following items from a hardware shop:

2 taps @ Shs. 175.

2 - 4L tins of paint @ Shs. 550.

$1\frac{1}{2}$ kg of filler powder for Shs. 60.

3 hinges each Shs. 30.

He paid for them using 2 - Shs. 1000 note. How much balance did he receive?

- A. Shs. 370
- B. Shs. 400
- C. Shs. 470
- D. Sh.s 330

32. Construct triangle XYZ in which line $XY = YZ = 6\text{cm}$ and angle $XYZ = 75^\circ$. Draw a circle touching vertices X, Y and Z. What is the radius of the circle?

- A. 7.8cm
- B. 3.5cm
- C. 3.9cm
- D. 3.0cm

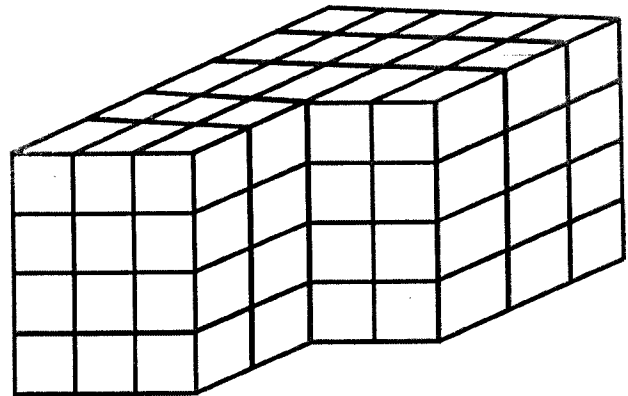
33. Two bells ring at intervals of 30 minutes and 40 minutes. They rang together at 8.45a.m. At what time did they ring together next?

- A. 10.45p.m
- B. 9.45a.m
- C. 10.45a.m
- D. 12.45p.m

34. The price of a pair of shoes was increased in the ratio 7:5. If the original price was Shs. 35, what was its price after the increase?

- A. Shs. 49.00
- B. Shs. 84.00
- C. Shs. 25.00
- D. Shs. 42.00

35. Calculate the number of cubes in the stack drawn below.



- A. 120
- B. 84
- C. 100
- D. 108

36. The marked price of a cupboard is Shs. 12000. The hire purchase price is Shs. 3000 more than the marked price. To buy it on hire purchase terms a deposit of Shs. 6000 is required. The remaining amount is paid in 10 months. What is the monthly installment?

- A. Shs. 300
- B. Shs. 1500
- C. Shs. 600
- D. Shs. 900

37. What is the value of:
 $\frac{1}{3}$ of $36 \div (2 \times 3)$?

- A. 2
- B. 6
- C. 3
- D. 4

38. The area of a triangle is 84cm^2 . Its base length is 12cm . Calculate its height.

- A. 7cm B. 28cm
C. 14cm D. 12cm

39. Below is a table showing the number of families and the number of children in the families.

Number of children	2	1	0	3	5	6
Number of families	2	3	3	4	5	1

How many children are there altogether?

- A. 17 B. 19
C. 53 D. 50
40. A rectangular piece of land measures 64m by 42m . It was fenced using 5 strands of wire. What was the length of the wire used?

- A. 506m
B. 530m
C. 1.06km
D. 0.98km

41. Simplify the following.

$$3x + 4 + \frac{3}{4}(12x - 8)$$

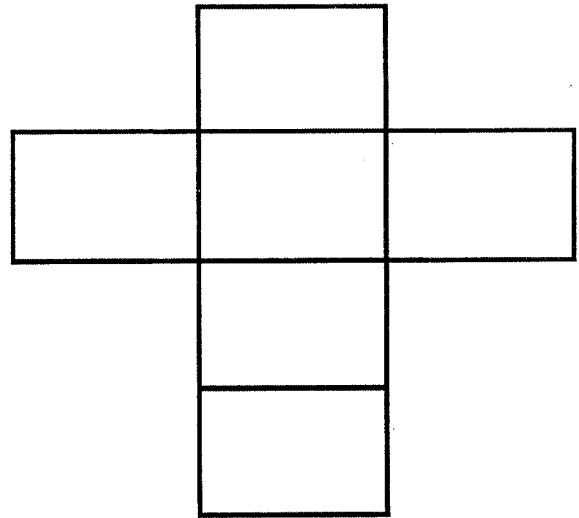
- A. $12x - 2$ B. $12x - 10$
C. $12x + 2$ D. $12x + 10$

42. A man is paid a commission of 12% on the value of goods sold above

Shs. 80000. His monthly basic pay is **Shs. 5500**. How much did he earn in a month that he sold goods worth **Shs. 140000**?

- A. Shs. 16800 B. Shs. 12700
C. Shs. 22300 D. Shs. 7200

43. Name the solid formed after folding the net drawn below.



- A. Square based pyramid
B. Rectangular pyramid
C. Triangular prism
D. Square based prism

44. If $a = 5$, $b = a - 1$, $c = 3$ and $d = 2c$. What is the value of: $\frac{3d + 2c - a}{b}$

- A. 1
B. 4
C. 2
D. 3

45. A cylindrical tank whose diameter is 200cm and a height of 500cm is half full of water. How many litres of water were in the tank? Use $(\pi = 3.14)$.

- A. 15700L
B. 15400L
C. 3080L
D. 7850L

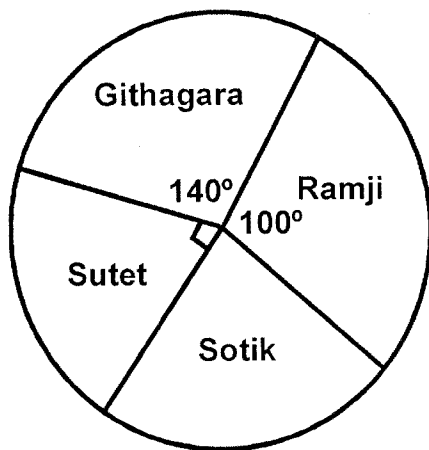
46. The table below shows postal charges for small packets.

	Weight Step	Charges
Small Packets Weight Limit 5kg	Upto 100g	25.00
	Over 100g upto 300g	40.00
	Over 300g upto 700g	70.00
	Over 700g upto 1kg	100.00
	Over 1kg upto 2kg	140.00
	Each additional 1kg upto 5kg	30.00

Aman sent a small packets weighing **4kg** through the post office. How much was he charged?

- A. Shs. 140.00
- B. Shs. 280.00
- C. Shs. 200.00
- D. Shs. 170.00

47. The pie chart below shows the number of text books given to 4 schools by the Ministry of Education.



If **600** books were given to Sotik School, how many more books did Githagara Primary receive than Ramji Primary?

- A. 200
- B. 600
- C. 400
- D. 800

48. The scale used in a map is **1:20000**.

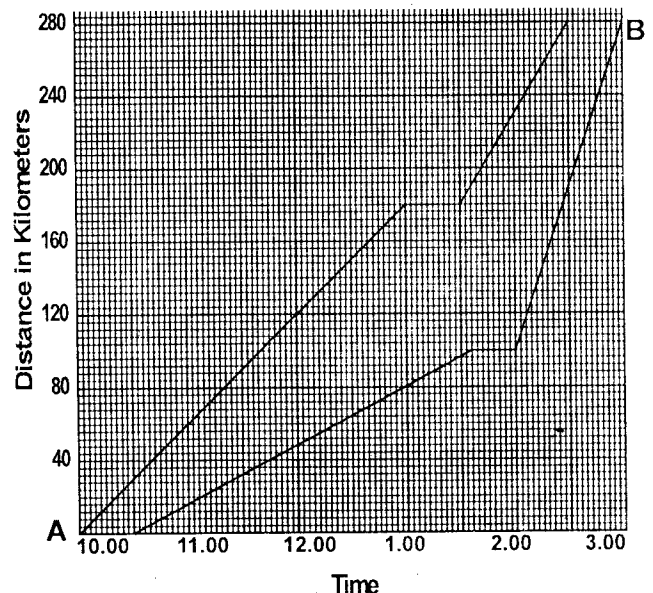
What is the drawing measurement of a line used to represent a road whose actual length is **8km**?

- A. 40cm
- B. 4cm
- C. 16cm
- D. 1.6cm

49. A closed cuboid measures **16cm** on its length. Its width is **10cm** while its height is **5cm**. What is the total length of its edges?

- A. 800cm
- B. 520cm
- C. 124cm
- D. 260cm

50. The graph below shows two motorists travelling from town **A** to town **B**.



How far apart were the two motorists by **1.00** o'clock?

- A. 50km
- B. 100km
- C. 40km
- D. 70km