

DISTINCTION KCPE CONQUEROR



003

003

STANDARD EIGHT - 2023

KCPE PREDICTION CONQUEROR

8

CONQUEROR

MATHEMATICS

TIME: 2HRS

CONQUEROR PREDICTION TEST

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]

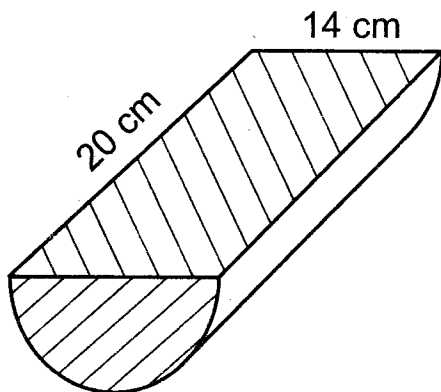
In the first set, the box with the letter **B** printed in it is marked.



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 9000090.9 in words
 - Ninety million nine hundred and nine
 - Nine million ninety thousand and nine
 - Nine million ninety thousand and nine tenths
 - Nine million and ninety and nine tenths
- What is the place value of digit 3 after working out $2 - 0.857$
 - Tens
 - Tenths
 - Thousandths
 - Hundredths
- Round off 67501 to the nearest thousands.
 - 68000
 - 67000
 - 60000
 - 70000
- How many groups of hundreds are there in the total value of digit 2 in the number 927546?
 - 20
 - 200
 - 2000
 - 20000
- What is the difference between the LCM of 20, 24 and 30 and the GCD of 30 and 45.
 - 120
 - 135
 - 105
 - 115
- In a certain leap year 20th February was on a Monday. What day of the week was 5th April of the same year?
 - Tuesday
 - Wednesday
 - Friday
 - Thursday



- 3080 cm^3
- 1540 cm^3
- 7700 cm^2
- 6160 cm^2

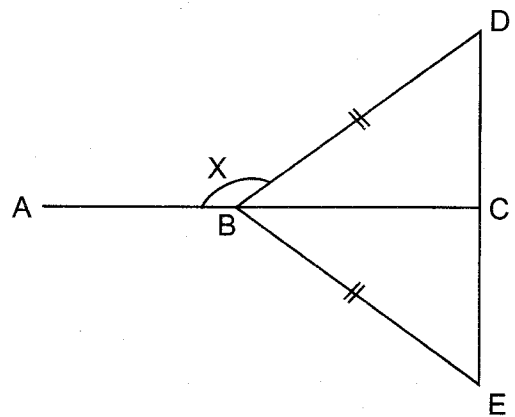
- I bought the following items from a supermarket.

2 loaves of breads @ sh 60
 2 - 500 ml packets of milk @ sh 80
 2 kg packet of maize flour for sh 160
 $1\frac{1}{2}$ kg packet of cooking fat at sh 100 per kg

If I paid for the items using 2 - sh 500 notes, how much was my balance?

 - Sh 410.00
 - Sh. 200.00
 - Sh. 250.00
 - Sh. 220.00
- A business man bought a bag of potatoes for sh 4200. He spent sh 200 to transport it to the market. He later sold it for sh 5720. What was the percentage profit?
 - 30%
 - 33%
 - 25%
 - 20%

- In the figure below line ABC is perpendicular to line DCE. Line BD = BE. Angle BEC = 50°



What is the value of the angle marked X

- 90°
 - 140°
 - 50°
 - 130°
- Solve the value of t in: $1\frac{1}{3}t - 17 + t = 25$
 - $2\frac{2}{7}$
 - 3
 - 18
 - 4

12. A farmer has 6 cows. Each cow produces an average of 6 litres per day. How many decilitres did the cows produce in the month of November?

- A. 1080 B. 108
C. 10800 D. 108000

13. Work out

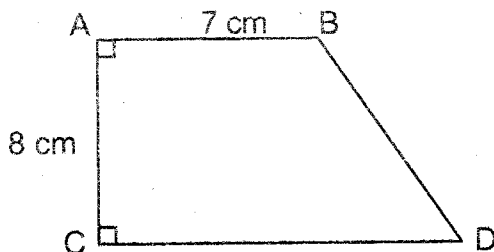
$$\frac{9.6 \times 8.5 \times 4.2}{3.4 \times 0.35 \times 1.8}$$

- A. 160 B. 16
C. 1.6 D. 0.16

14. The diagonal of a rectangle is 30 cm. One of the sides measures 18 cm. What is its area?

- A. 216 cm²
B. 432 cm²
C. 576 cm²
D. 288 cm²

15. The area of the trapezium drawn below is 96 cm²



What is the length of line CD

- A. 18 cm
B. 17 cm
C. 12 cm
D. 24 cm

16. Nyaga bought a bed on hire purchase terms. He paid a deposit of sh 6400 and 5 equal monthly instalments of sh 1600 per month. The total amount paid was 20% more than the marked price what was the marked price of the bed?

- A. Sh. 14000
B. Sh. 2400
C. Sh. 12000
D. Sh. 16400

17. The scale drawing in a map is 1:50000. What is the actual distance of a section of a road whose drawing length is 4.4 cm?

- A. 2.2 km
B. 22 km
C. 0.22 km
D. 220 km

18. A man shared his piece of land between his two sons in the ratio 4:5. The younger son got the greater share. If the younger son got 20 hectares, how many hectares of land did the elder son received?

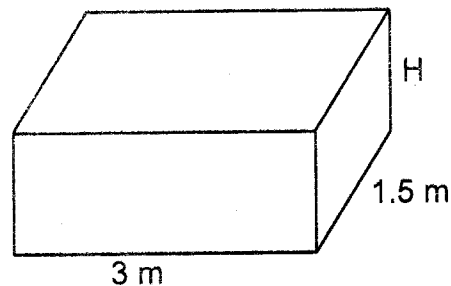
- A. 20 ha B. 25 ha
C. 12 ha D. 16 ha

19. What is the value of

$$3\frac{3}{4} - 11\frac{1}{4} \div 4\frac{1}{2} \times \frac{2}{3}$$

- A. $1\frac{1}{12}$ B. $2\frac{1}{12}$
D. $1\frac{1}{2}$ D. $2\frac{1}{3}$

20. The volume of the figure below is 9000,000 cm³



Calculate its height.

- A. 20 m B. 300 cm
C. 3 m D. 2 m

21. Joan's salary was increased in the ratio 9:8. She now earns sh 72000. What was her salary before the increase?

- A. Sh 64000
B. Sh 81000
C. Sh 80000
D. Sh 68000

22. Construct triangle PRT such that line RT = 8cm. Line PR = PT = 6cm. Draw circle touching vertices P, R and T. What is the radius of the circle?

- A. 7.0 cm B. 4.2 cm
C. 5.5 cm D. 6.5 cm

23. Simplify the inequality

$$11p - 7 > 7p + 11$$

- A. $p > 6$
B. $p > 1$
C. $p > 4\frac{1}{2}$
D. $p < 1$

24. Pamela deposited sh 24000 in a bank. After 2 years, she withdrew sh 26400 which included the total interest earned. At what rate was the bank giving the simple interest?

- A. 10% B. 15%
C. 2.5% D. 5%

25. A bus covered 54 km in 30 minutes. What was its speed in m/s

- A. 5 m/s B. 15 m/s
C. 30 m/s D. 20 m/s

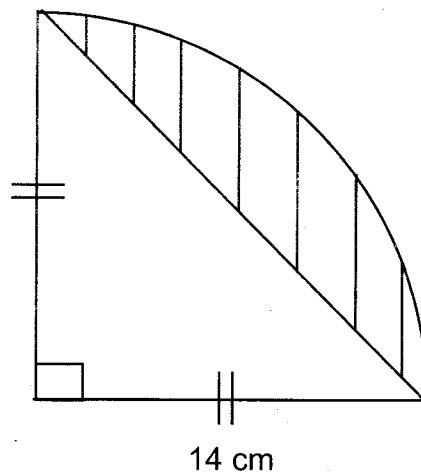
26. Khadija left home for town at 9:15 a.m. She arrived in town at 2:05 p.m. How long did the journey take?

- A. 7 hrs 10 mins
B. 4 hrs 50 mins
C. 4 hrs 10 mins
D. 2 hrs 50 mins

27. 5 women can take 15 hours to complete weeding a maize farm. How many more hours can 3 women working at the same rate take to complete doing the same work?

- A. 25 hrs
B. 15 hrs
C. 10 hrs
D. 5 hrs

28. What is the area of the shaded part in the figure below.



- A. 154 cm^2
B. 42 cm^2
C. 56 cm^2
D. 210 cm^2

29. A farmer keeps chicken, pigs and cows in his farm. $\frac{1}{5}$ of the animals are pigs, $\frac{1}{3}$ are cows and the rest are chicken. If there are 70 chicken, how many animals are there altogether?

- A. 150 B. 75
C. 140 D. 120

30. If $m = 6$, $p = 5$ and $t = \frac{1}{2}m$, what is the value of:

$$\frac{mp + 2t}{m + t} + (m - t)$$

- A. 5 B. 6
C. 8 D. 7

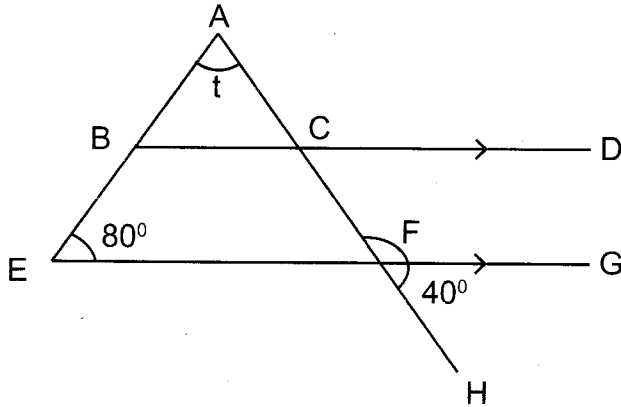
31. How many 1.25kg packets of flour will weigh one tonne.

- A. 8000 B. 800
C. 80 D. 8

32. Runjas paid sh 1020 for a trouser after receiving a discount of sh 180. What was the percentage discount given?

- A. 10%
B. 15%
C. 30%
D. 20%

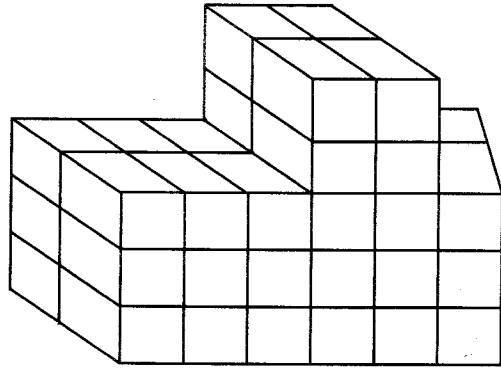
33. In the figure below line BCD is parallel to line EFG. Angle BEF = 80° and angle GFH = 40°



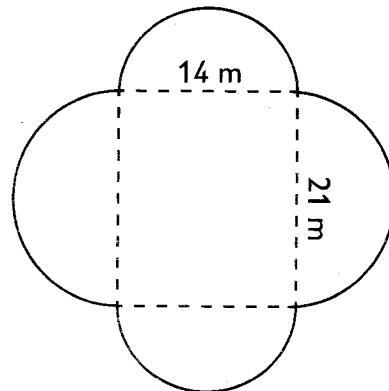
What is the size of the angle marked t

- A. 80° B. 50°
C. 100° D. 60°
34. Three girls bought oranges as follows. Jane bought y oranges, Tessy bought $2p$ oranges and Mitchel bought half the number of oranges Tessy bought. Which one of the following expression shows the total number of oranges the three girls bought?
- A. $2p + y$ B. $p + y$
C. $3p + y$ D. $2p + 2y$
35. A rectangular plot measures 32.5m by 19.5m . It was fenced round with 4 strands of barbed wire. What was the length of the wire used?
- A. 104 m B. 416 m
C. 52 m D. 208 m
36. A plank of timber 6.5 m long touches a wall to a height of 6 m . What was the horizontal distance from the foot of the wall to the bottom of the plank of timber?
- A. 2 m B. 4 m
C. 5 m D. 2.5 m
37. The mean mass of 7 boys is 38kg . Five of them weighs 35kg , 40kg , 41kg , 39kg and 37kg . What is the mean mass of the other 2 boys?
- A. 74 kg B. 35 kg
C. 38 kg D. 37 kg

38. How many cubes have been used to construct this stack.



- A. 36 B. 60
C. 44 D. 48
39. The diameter of a closed cylindrical tin is 7 cm . Its height is 14 cm . Calculate its surface area.
- A. 308 cm^2 B. 385 cm^2
C. 462 cm^2 D. 231 cm^2
40. What is the distance round the figure drawn below.



- A. 110 m B. 220 m
C. 440 m D. 55 m
41. The table below shows bus fare from Nanyuki to Nairobi for an adult.
- | | | | | |
|---------|-------|----------|--------|-------|
| Nanyuki | | | | |
| 80 | Nyeri | | | |
| 220 | 120 | Karatina | | |
| 250 | 200 | 100 | Sagana | |
| 400 | 280 | 220 | 140 | Thika |
| 500 | 400 | 320 | 200 | 80 |
| Nairobi | | | | |
- The fare for children is half that of adults. Joan and her two children left Nairobi for Nanyuki via Karatina. How much did she pay for their bus fare?
- A. sh. 1000 B. sh. 1020
C. sh. 1080 D. sh. 540

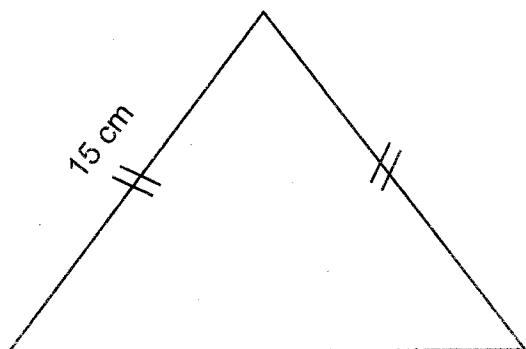
42. What is the smallest number that can be subtracted from 52749 to make it divisible by 11?

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

43. A trader had seven sh 1000 notes. He changed the money into equal sh 500 and sh 200 notes. How many notes did he get altogether?

- A. 10
B. 20
C. 5
D. 14

44. The perimeter of the figure below is 48 cm.



What is its area

- A. 216 cm^2
B. 135 cm^2
C. 90 cm^2
D. 108 cm^2

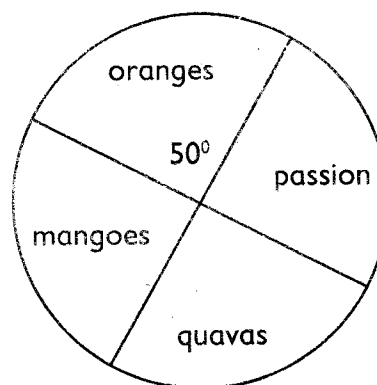
45. The table below shows tariff for ordinary money order and express money order.

Range in shillings	Ordinary money order commission	Express money order commission
Upto 500	15	20
Over 500 upto 1000	25	30
Over 1000 upto 2500	40	50
Over 2500 upto 5000	59	70
Over 5000 upto 10000	72	85
Over 10000 upto 15000	95	105

Tomas sent one express money order worth sh 2350 and one ordinary money order worth sh 12000. How much commission was he charged at the post office?

- A. sh. 145.00
B. sh. 135.00
C. sh. 155.00
D. sh. 140.00

46. The pie chart below represents the number of different types of fruit tree in Ndongo's farm.



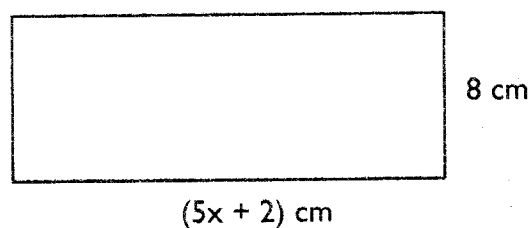
The farmer had equal number of mangoes and passion fruit trees and equal number of oranges and quavas fruit trees. If there are 108 trees altogether, how many mangoes fruits trees are in his farm?

- A. 13
B. 39
C. 26
D. 15

47. A circular grass lawn was fenced round with poles placed 3.5m apart. If 21 poles were used, what was the circumference of the lawn?

- A. 22 m
B. 73.5 m
C. 231 m
D. 70 m

48. The area of the figure below is 176 cm^2 .



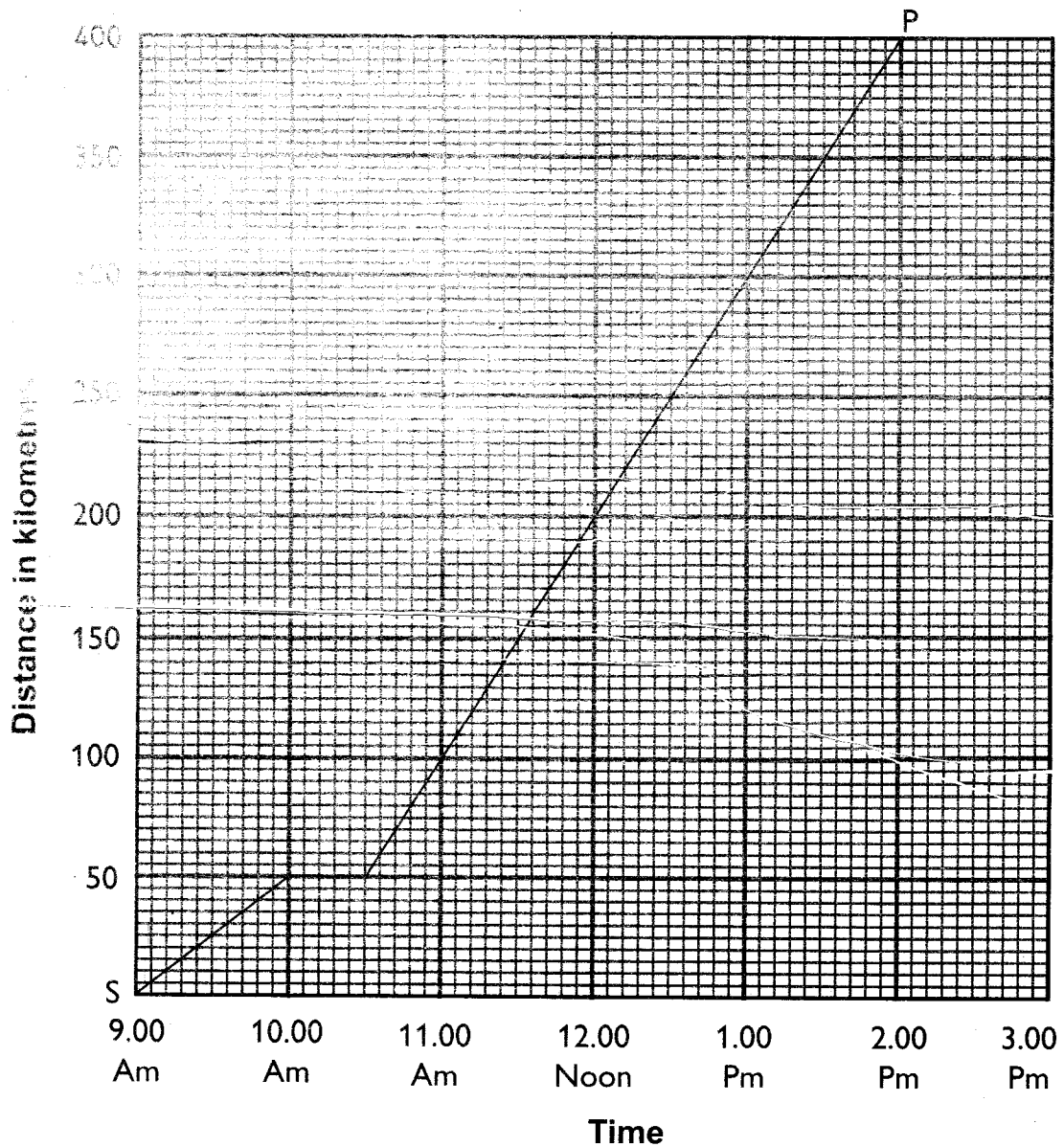
What is the value of x in the figure above.

- A. 22 cm
B. 20 cm
C. 11 cm
D. 4 cm

49. Twelve children and four adults bought milk from a milk seller. The adults bought 500 ml packet each while the children bought 250 ml packets of milk each. How many litres of milk did they all buy?

- A. 6 L
B. 5 L
C. 8 L
D. 4 L

50. The graph below shows Osongo's journey from town S to P.



What was his average speed from 11.00 a.m to 2.00 p.m?

- A. 100 km/h
- B. 50 km/h
- C. 75 km/h
- D. 150 km/h