STEP FLYER ASSESSMENT TEST

STANDARD 8 - YEAR 2023

MATHEMATICS

STEP FLYER SERIES — STEP FLYER — 002

8

Time : 2 Hours

READ THESE INSTRUCTIONS CAREFULLY.

1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.

2. Make sure that you have written on the answer sheet.

(i) Your name *(ii) Name of your school*

1. What is **fifteen million fifteen thousand** and **fifteen** written in symbols?

A. 150015015 B. 1501515

C. 15150015 D. 15015015

2. What is the place value of digit 2 in the number **682407**?

A. Hundreds B. Ten of thousands

C. Thousands D. Tens

3. Round off the following numbers to the nearest ten thousand and then find their sum 63497 and 7324

A. 60,000 B. 70,000

C. 68000 D. 50,000

4. Which one of the following is a prime number?

A. 51 B. 91

C. 79 D. 35

5. What is the total value of digit **3** in **8.4732**

A. 0.003 B. 8.003

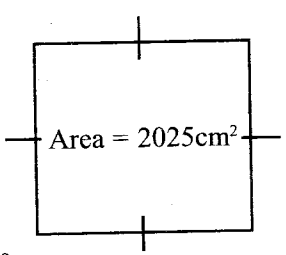
C. 0.03 D. 0.0032

6. Work out: **80764 x 913** =

A. 72737532 B. 73 737 432

C. 73727532 D. 73 737 532

7. The area of the square plot shown is $2025m^2$. What is its perimeter



A. 180m B. 220m

C. 45m D. 90m

8. What is the smallest number which must be added to **6983** to make it divisible by **11**

A. 1 B. 3

C. 4 D. 2

9. **What is the value of**

28 x 5 - 60 ÷ 12 + 30 x 4 =

A. 215 B. 255

C. 260 D. 15

10. Arrange the following fractions from the largest to the smallest $^4/_5$, $^2/_3$, and $^5/_7$

A. $^2/_3, ^4/_5, ^5/_7$ B. $^4/_5, ^2/_3, ^5/_7$

C. $^5/_7, ^4/_5, ^2/_3$ D. $^4/_5, ^5/_7, ^2/_3$

11. A factory packs soap in sachets which are later packed into cartons. Each carton holds 80 sachets. The factory packed 120 such cartons Soap in 12 cartons was destroyed by rain. The remaining soap was shared equally among 8 dealers. How many sachets did each dealer get?

A. 1320 B. 14

C. 1080 D. 1200

12. **Work out:** $\frac{1}{2}$ *of* $\left(\frac{3}{4}-\frac{2}{5}\right) \div 2\frac{4}{5}$

A. $^1/_{16}$ B. $^{25}/_{49}$

C. $^{13}/_{56}$ D. $^{49}/_{100}$

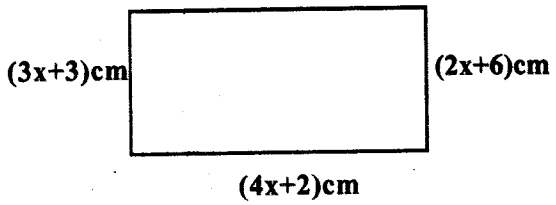
13. How many groups of hundred are there in the value of digit 4 in 943610.

A. 40 B. 400

C. 4000 D. 40000

14. In the year 2004 February 19th was Thursday. What day was 6th March the same year?
A. Sunday B. Saturday
C. Friday D. Wednesday

15. The figure below is a rectangle what is its area?



A. $52cm^2$ B. $36cm^2$
C. $26cm^2$ D. $168cm^2$

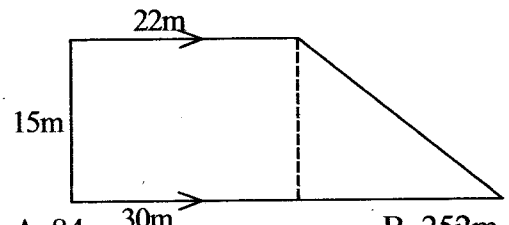
16. **Work out** 1.125 + 0.4 + 0.0125
A. 1.254 B. 1.1375
C. 1.5375 D. 1.525

17. **What is** $\sqrt{1\frac{9}{16}}$
A. $1\frac{1}{4}$ B. $\frac{3}{4}$
C. $\frac{4}{5}$ D. $\frac{25}{16}$

18. **Simplify** 2(3x-2y) + 3 (x-3y)
A. 3x+5y B. 3x-5y
C. 9x-13y D. 3x-13y

19. **Express** $\frac{5}{13}$ as a decimal correct to two decimal places.
A. 0.34 B. 3.84
C. 0.684 D. 0.38

20. Onyango fenced his plot of land shown using three strands of wire.



A. 84m B. 252m
C. 390m D. 0.84m

21. The marked price of a T.V set was Sh.5000. If Mwanzo paid Sh.4500 for the set. What was the percentage discount?
A. 15% B. 10%
C. 5% D. 20%

22. In a school $\frac{5}{8}$ of the pupils are boys. If the school has 300 girls, what is the total number of pupils in the school?
A. 800 B. 500
C. 600 D. 400

23. Change 108km/h into m/s
A. 30m/s B. 90m/s
C. 148m/s D. 388.8m/s

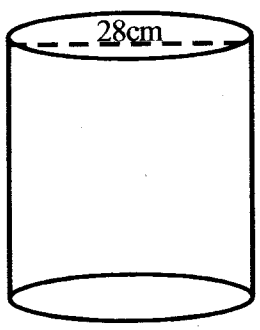
24. A motorist started his journey at 10.35am. If he reached his destination at 4.55pm, how long did the journey take?
A. 6h 20min B. 5h 20min
C. 6h 40min D. 5h 40min

25. Which one of the following measurements will form a right angled triangle?
A. 6cm, 8cm, 9cm B. 4cm, 5cm, 6cm
C. 21cm, 24cm, 25cm D. 12cm, 16cm, 20cm

26. Three buses leave at intervals of 15minutes, 6 minutes and 12 minutes respectively. If they left together at 8.00 am. When will they leave together again?
A. 60min B. 9.00am
C. 10.00am D. 7.00am

27. Construct an equilateral triangle **XYZ** of side 8cm. Draw a circle to pass through the vertices **XY** and **Z** what is the diameter of the circle?
A. 10cm B. 9.2cm
C. 4.6cm D. 5cm

28. The cyclinder below has an open top. Calculate its surface area.



A. $616cm^2$ B. $5632cm^2$
C. $3784cm^2$ D. $5016cm^2$

29. The temperature of a certain town was 20°c in the morning. If at 12 noon the temperature rose by 10°c. What was the new temperature?

A. 10°c B. 32°c

C. 30°c D. 8°c

30. A section of a road 4km long is represented on a map by 4cm. What is the scale used?

A. 4:4

B. 1:100 000

C. 1:1000 000

D. 1:10 000

31. Six men take 4 days to paint a house. How many days will 4 men take?

A. 6 B. 2

C. 4 D. $2^2/_3$

32. The following are properties of a certain quadrilateral

(i). all sides are equal

(ii). opposite sides are parallel

(iii). each angle is a right angle

(iv). diagonals are equal and bisect each other at right angle

Which quadrilateral is described above?

A. Rhombus B. Parallelogram

C. Rectangle D. Square

The table below shows patients who visited a certain hospital for malaria test.

Mon	Tue	Wed	Thur	Fri
45	50	75	60	55

33. How many more patients visited the hospital on Wednesday than friday?

A. 20 B. 15

C. 130 D. 25

34. What number should be in the box marked **T**

T	**2**	
	6	**8**
	10	**3**

A. 9 B. 5

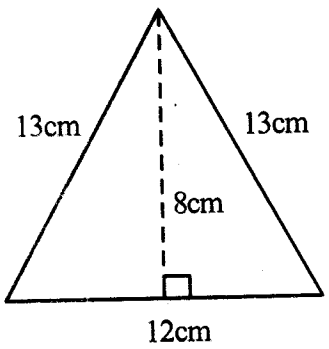
C. 4 D. 7

35. Mogaka spent $^1/_3$ of his salary on food $^1/_4$ on rent $^3/_5$ of the remainder on clothes and saved the rest. What fraction did she save?

A. $^7/_{12}$ B. $^5/_{12}$

C. $^1/_6$ D. $^1/_4$

36. Find the area of the figure below



A. 78cm² B. 102cm²

C. 96cm² D. 48cm²

37. What is the next number in the pattern

4,9,16, 25, 36, ____

A. 64 B. 45

C. 49 D. 60

38. A farmer harvested 12 tonnes of wheat. How kilograms of wheat did he harvest?

A. 120kg

B. 12000kg

C. 1200kg

D. 12000 000kg

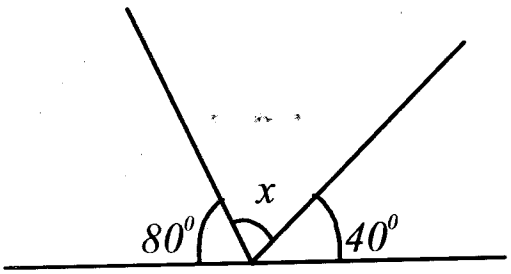
39. Simplify the following inequality

$^4/_5y+5>15$

A. y>15 B. y>10

C. y<15 D. y<10

40. Calculate the size of angle marked **x**



A. 120° B. 40°

C. 80° D. 60°

41. What is the G.C.D of 18, 36 and 60

A. 18 B. 6

C. 5 D. 12

42. Three boys had the following masses 45kg, 40kg and 65kg. What was their mean mass

A. 75kg

B. 45kg

C. 50kg

D. 40kg

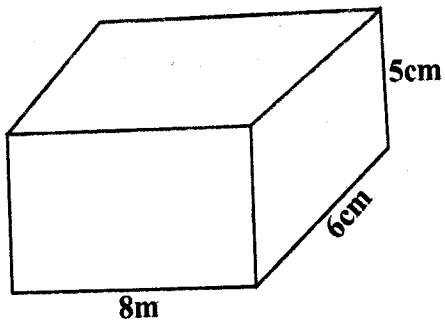
43. If $a=6, b=4\ c=2$ find the value of

$$\frac{2a+b}{cb}$$

A. 8 B. 16

C. 2 D. 4

44. Calculate the volume of the cuboid below



A. $24m^3$ B. $320m^3$

C. $200m^3$ D. $240m^3$

45. Joy bought a dress for Sh.2800 and later sold it for 3220. Calculate her percentage profit

A. 15% B. 40%

C. 20% D. 10%

46. Benson scored the following marks

Mathematics	***8***
Science	***6***
English	***9***
Kiswahili	*7*

If these marks are represented in a pie chart, what angle would represent English

A. 108^0

B. 216^0

C. 90^0

D. 720

47. Managu deposited Sh.20,000 in a bank which gave interest rate of 5% p.a. How much interest did Managu get after 2 years.

A. Sh.22000

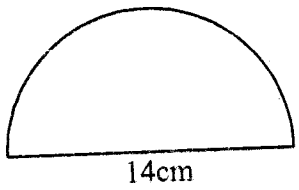
B. Sh. 1000

C. Sh. 18000

D. Sh. 2000

48. Find twice the perimeter of the figure below

$\pi = {}^{22}/_{7}$



A. 36cm B. 44cm

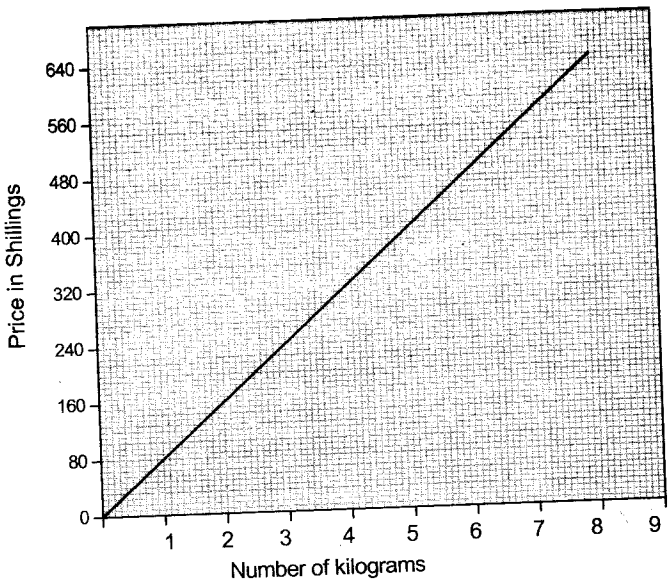
C. 72cm D. 88cm

49. What is the sum of edges and vertices of an open cube?

A. 16 B. 20

C. 25 D. 12

The graph below shows the price of sugar per kilogram. Use it to answer question number 50.



50. How many kilograms of sugar would one buy for Sh. 480

A. 8kg B. 5kg

C. 6kg D. 7kg