

STEP FLYER ASSESSMENT TEST

STD 8 - YEAR 2020

MATHEMATICS

8

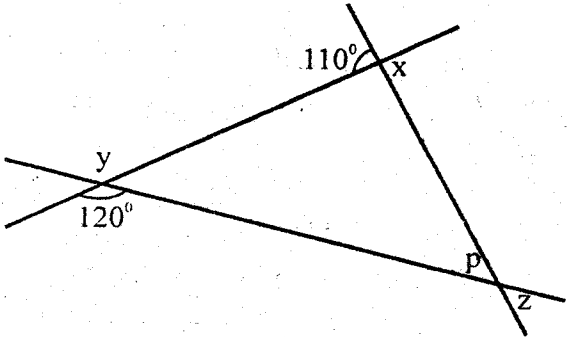
Time : 2 Hours

READ THESE INSTRUCTIONS CAREFULLY.

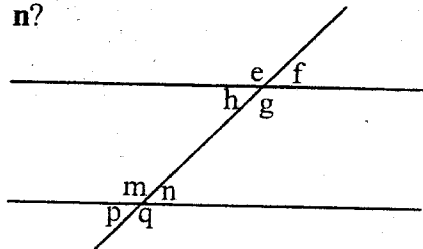
1. You have been given this question paper and a separate answer sheet. The question paper contains 50 questions.
2. Make sure that you have written on the answer sheet.

(i) Your name

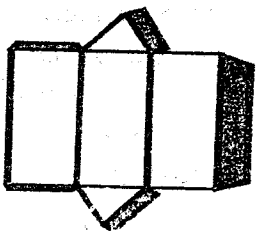
(ii) Name of your school

1. Write in figures thirty million thirty thousand and thirty
A. 30003030 B. 30030030
C. 30000 0330 D. 30300030
2. What is the place value of the digit 2 in 9820503?
A. hundreds B. thousands
C. ten thousands D. hundred thousands
3. What is the greatest common divisor of the numbers 32, 48 and 56
A. 86016 B. 672
C. 168 D. 8
4. What is 499.99876 rounded off to the nearest hundredths?
A. 499.9 B. 499.90
C. 499.99 D. 500.00
5. What is the next number in the sequence 7, 16, 32, 57, _____
A. 63 B. 82
C. 89 D. 93
6. Fifteen men working at the same rate would complete some work in 10 days. How many days would six men need to complete the same work?
A. 150 B. 25
C. 9 D. 4
7. What is the $\sqrt{7\frac{9}{16}}$
A. $7\frac{3}{4}$ B. $2\frac{3}{4}$
C. $11\frac{1}{16}$ D. $1\frac{3}{8}$
8. What is the value of:
 0.0135×0.48
0.016
A. 0.0405 B. 0.405
C. 4.05 D. 40.5
9. The diagram below shows three lines which form triangle XYZ

What is the value of p?
A. 130 B. 50
C. 60 D. 70
10. A rectangular container measures 75cm by 50cm by 1m. What is the capacity of the container in litres?
A. 3.75L B. 37.5L
C. 375L D. 3750L
11. What is the value of $\frac{7}{8}$ of $(\frac{4}{5} + \frac{1}{2}) \div \frac{1}{4}$
A. $4\frac{4}{5}$ B. $4\frac{11}{20}$
C. $2\frac{7}{10}$ D. $9\frac{1}{20}$
12. Mwenda spent half of his salary on rent and a third of the remainder on food. He saved the rest. If he saved sh 600. How much had he earned
A. Sh 3600 B. Sh 1200
C. Sh 1800 D. Sh 900
13. $4y + 9 < 9y - 11$
A. $y < 4$ B. $y > 4$
C. $4 = y$ D. $4 > y$

14. The figure below shows angles formed by a pair of parallel lines and a transversal. In which group below are each angle equal to n ?



- A. pgf
C. pqf
- B. pmf
D. phf
15. What is the value of $\frac{0.5 + 0.2 \div 0.25}{0.2}$
- A. 6.5
C. 2.6
- B. 0.65
D. 10
16. The level of water in a tank was decreasing by 20% each day. If the level of water was 2500cm^3 . What will be the level of water after three days
- A. 1280
C. 1000
- B. 1200
D. 1500
17. What is the quotient of LCM and GCD of 66 and 10
- A. 330
C. 125
- B. 115
D. 165
18. What must be subtracted from the total value of digit 5 in the following number to get the square of 100
27050368
- A. 368
C. 40000
- B. 4000
D. 10,000
19. Below is a net of a solid. The shaded part are flaps



- Which solid can be formed from the net
- A. Triangular prism
B. Triangular pyramid

- C. Rectangular prism
D. Rectangular pyramid
20. Mr. Korir paid sh 20400 for a cow after getting a 15% discount what was the marked price of the cow?
- A. Sh 17340
C. Sh 23060
- B. Sh 30600
D. Sh 24000
21. The length of a rectangle is 6cm longer than its width. If the perimeter is 52cm. Calculate its area
- A. 312cm^2
C. 138cm^2
- B. 160cm^2
D. 208cm^2
22. What is 0.2644 correct to the nearest tenths?
- A. 0.20
C. 0.3
- B. 0.26
D. 0.2
23. Thirty women can dig a shamba in 15 days. How many more days would 18 women take to dig the same shamba?
- A. 60
C. 25
- B. 30
D. 10
24. John bought the following items from a boutique
a shirt @ sh 400
a suit @ sh 3200
two jackets @ sh 800
A discount of 10% was given for every item priced @ sh 700 or more. How much did John pay for the items?
- A. Sh 4720
C. Sh 480
- B. Sh 5680
D. Sh 5200
25. The hire purchase price of a radio is 25% more than the cash price. The cash price is sh 30,000. Joyce paid sh 6000 as monthly installments for 5 months. How much deposit did she pay
- A. Sh 30000
C. Sh 37500
- B. Sh 2500
D. Sh 7500
26. John was riding at a speed of 54km/h and took 5 seconds to cross a bridge. What was the length of the bridge
- A. 75m
C. 40m
- B. 100m
D. 59m

27. Evaluate

$$\left(1\frac{1}{4}\right)^2 \times \sqrt{17\frac{16}{25}}$$

- A. $11\frac{2}{3}$ B. $6\frac{9}{16}$
 C. $9\frac{3}{8}$ D. $5\frac{1}{4}$

28. The ratio of girls to boys in a school is 3:2 if there are 120 more girls than boys, how many boys are there in the school

- A. 360 B. 400
 C. 600 D. 240

29. Express $12\frac{1}{2}\%$ as a fraction

- A. $\frac{1}{8}$ B. $\frac{25}{2}$
 C. $\frac{2}{25}$ D. $\frac{1}{4}$

30. The temperature of cold water is 2°C . It was heated until it boiled. What was the rise in temperature

- A. 10°C B. 102°C
 C. 98°C D. 8°C

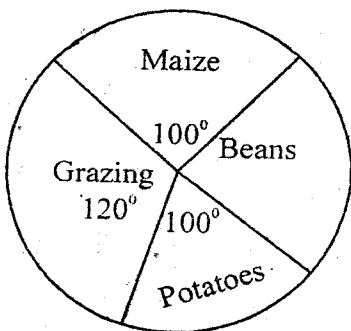
31. At a certain function there were 10 000 people of these $\frac{3}{10}$ were men, $\frac{1}{4}$ were women and the rest were children. How many more children than men were there

- A. 6000 B. 1500
 C. 4500 D. 3000

32. Construct triangle XYZ in which $XY=YZ=ZX=6.8\text{cm}$. Draw a circle that passes through points X, Y and Z. What is the radius of the circle

- A. 3.9 cm B. 4.2 cm
 C. 3.4 cm D. 3.6 cm

The pie chart below shows how kuria used his 18 hectare farm. Use it to answer questions 33 and 34.



33. How many hectares did he use for growing maize than beans?

- A. 9 B. 3
 C. 8 D. 5

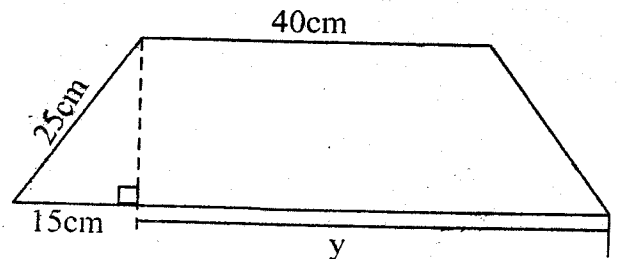
34. How many hectares did he use for grazing and growing potatoes

- A. 5 B. 4
 C. 2 D. 11

35. What is the sum of the total value of digit 4 and 0 in the numbers 54307?

- A. 4010 B. 4100
 C. 4000 D. 3900

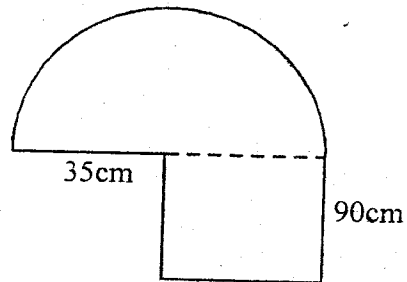
36. The figure below represents a design of a trapezium on a sheet of paper.



If its area is 1200cm^2 what is the measurement of the length marked y?

- A. 55cm B. 20cm
 C. 65cm D. 80cm

37. Calculate the perimeter of the figure shown below.



- A. 325cm B. 360cm
 C. 470cm D. 395cm

38. Find the value of:

$$1\frac{2}{3} - \frac{4}{15} \div \frac{2}{5} + \frac{1}{2}$$

- A. $1\frac{1}{2}$ B. $\frac{9}{25}$
 C. $\frac{4}{9}$ D. $\frac{5}{6}$

39. A trader packed two bags of sugar each of 100kg into 250g packets. How many such packets did he obtain?

- A. 40 B. 800
 C. 400 D. 80

40. A 7.5km section of a road was represented by a length of 5cm on a map. What was the scale used on the map?

- A. 1:1500 B. 1:150000
C. 1:15000 D. 1:1500000

41. A container holds 0.625m³ of water. Tunoi packed the water into 5-decilitre packets. How many packets did he use?

- A. 3125 B. 12
C. 1250 D. 125

42. The mean mass of five girls is 38kg. If the mass of the first four is 35kg, 47kg, 36kg and 30kg what is the median weight

- A. 36 B. 42
C. 47 D. 32

43. What is the next number in the sequence below

5, 6, 11, 17 _____

- A. 33 B. 39
C. 28 D. 29

44. Which is the smallest number that can be added to 627931 to make it divisible by 11

- A. 7 B. 4
C. 5 D. 2

45. Simplify the following

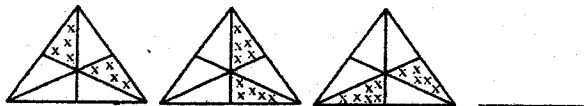
$$\frac{1}{3}(x - 2y) + \frac{3}{4}(x - 5y)$$

- A. $1\frac{1}{12}x - \frac{4}{16}y$
B. $1\frac{1}{12}x + 3\frac{1}{12}y$
C. $\frac{5}{12}x + 3\frac{1}{12}y$
D. $1\frac{1}{12}x - 4\frac{5}{12}y$

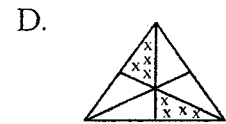
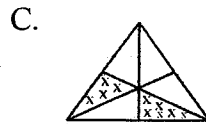
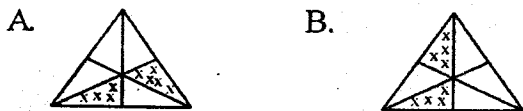
46. A pipe whose diameter is 28cm is 1.5m long. What is its surface area in square centimeters

- A. 1.32cm² B. 13200cm²
C. 1320cm² D. 132cm²

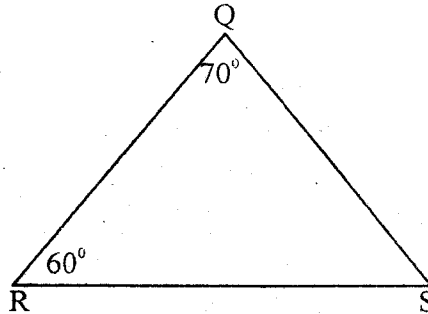
47. The figure below shows a pattern of shapes



Which of the following shapes is the next pattern



48. Find the size of the reflex angle RSQ

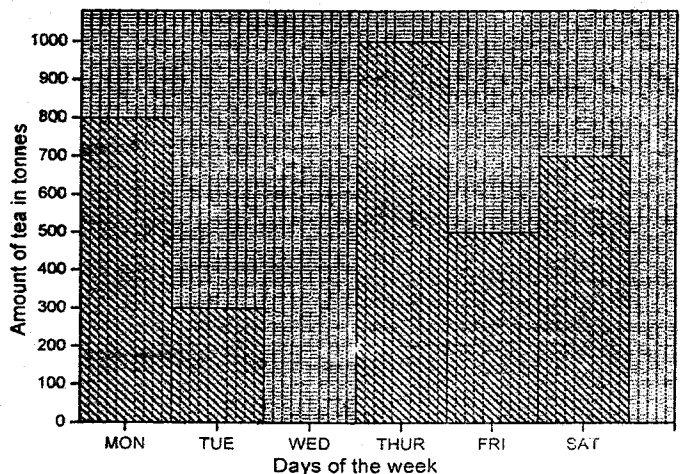


- A. 130° B. 310°
C. 250° D. 50°

49. A boy saw 2 birds on a tree. he was joined by 8 others. how many birds altogether could all of them see on the tree?

- A. 18 B. 16
C. 10 D. 2

The bar graph below shows the amount of tea delivered to a tea factory in one week.



50. On which day did the factory receive the least amount of tea?

- A. Tuesday
B. Thursday
C. Wednesday
D. Monday