CLASS 8 MID TERM 2 OCTOBER 2020

MATHEMATICS

1. What is sixty million four hundred thousand five hundred and two written in symbols ?
   A. 60 004502
   B. 60040502
   C. 60400052
   D. 60400502

2. In the number **7040205**, the total value of digit **4** is added to the total value of digit **2**. Which one of the following is the correct answer ?
   A. 4200 B. 40200
   C. 4020 D. 420

3. What is the difference between the L.C.M and the H.C.F of the numbers **24, 36** and **72** ?
   A. 12 B. 72
   C. 60 D. 84

4. Hosea stayed with his aunt from 15th December 2015 to 15th March 2016. For how many days did he stay there ?
   A. 90 B. 91
   C. 92 D. 93

5. What is the value of
   (16805 - 1400 - 1325 + 1125) ÷ 5
   A. 15205 B. 3571
   C. 3121 D. 3041

6. What is the squareroot of the number obtained when **4096** is divided by **4** ?
   A. 32 B. 1024
   C. 64 D. 16

7. What is the next number in the pattern
   9, 14, 21, 32, 45, __ ?
   A. 60 B. 62
   C. 81 D. 51

8. A 26 seater minibus and a 14 seater matatu were to transport 506 pupils to an agricultural show. If the minibus made an extra trip than the matatu, how many pupils did the minibus transport ?
   A. 312 B. 168
   C. 182 D. 338

9. What is **2804993** rounded off to the nearest ten thousand ?
   A. 2810000 B. 2800000
   C. 2805000 D. 2804000

10. What is the value of

    $2\frac{3}{5} - \frac{1}{4} \div \frac{1}{2} + \frac{1}{8}$?

    A. $2\frac{3}{5}$ B. $1\frac{39}{40}$
    C. $\frac{29}{40}$ D. $2\frac{9}{40}$

11. In the year 2018, there were 240 boys and 360 girls in Furaha Academy. The following year, the number of boys increased by 25% while that of girls decreased by 25%. How many pupils were in the school that year ?
    A. 150 B. 600
    C. 630 D. 570

12. What is **468. 3998** rounded off to the nearest thousandths ?
    A. 468. 400
    B. 468. 4
    C. 468. 399
    D. 468. 4000

13. What is the place value of digit **5** in **16. 432 ÷ 8**?
    A. Tenths B. Hundreds
    C. Hundredths D. Thousandths

14. What is the value of

    $$\frac{4.5 - 2.4 \times 0.6 + 2.94}{2.4 \div 0.4}$$

    A. 0. 02 B. 0. 54
    C. 0. 7 D. 1.0

15. What is the value of

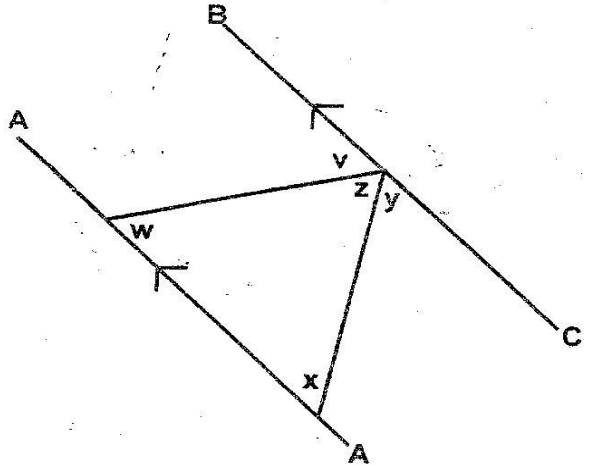
    $$\sqrt{\frac{0.0625 - 0.0049}{0.04}}$$

    A. 0.9 B. 1.2
    C. 6 D. 1.44

16. Kilimo gave 0.3 of his land to his oldest son, 0.25 to the second born and 0.21 to his daughter .If he had 4.5 hectares of land, how many hectares was he left with ?

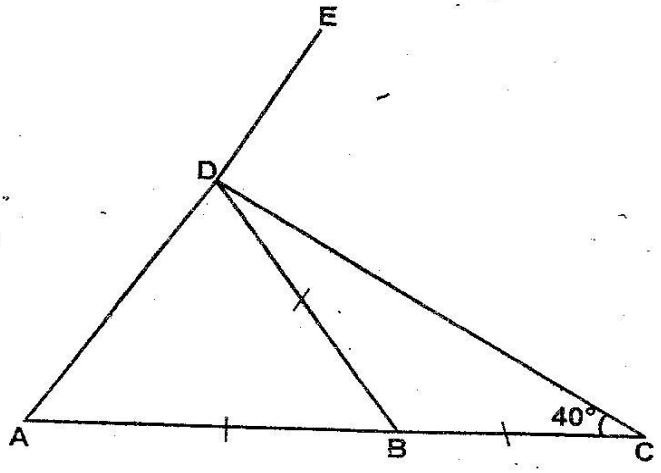
A . 3. 74 B. 0. 72
C. 3. 42 D. 1. 08

17. In the figure below, AB is parallel to CD



Which one of the following statements is true?
A. $x° + z° + y° = 180°$
B. $w° + x° + y° = 180°$
C. $x° + z° + v° = 180°$
D. $w° + x° + v° = 180°$

18. In the figure below , ADE and ABC are straight lines. Line AB= BD = BC and angle BCD = 40°



What is the size of angle **CDE**?
A. 50° B. 80°
C. 40° D 90°

19. On line EF drawn below construct triangle EFG such that angle FEG = 30° and line EG = 10 cm. Bisect angle EFG and draw the bisector to meet EG at O

What is the size of angle **GOF** ?
A . 95° B. 85°
C. 57° D. 43°

20. Which of the following statements is true about a trapezium ?
A. All angles are equal
B. Diagonals bisect each other at right angles
C. Opposite sides are equal
D. Has one set of parallel sides

21. A plot of land is in the shape of a right angled triangle. The length of the longest side measures 30 metres while one of the shortest side measures 18 metres. What is the area of the plot in square metres ?
A. 270 B. 216
C. 432 D. 360

22. Wario spent $^2/_5$ of his money on food, $^1/_3$ on school fees , $^3/_4$ of the remainder on rent and saved the rest. What total fraction of his money did he save and spent on food ?

A. $^3/_5$ B. $^1/_{15}$
C. $^7/_{15}$ D. $^8/_{15}$

23. Which one of the expressions below is the simplest form of

$$\frac{6(x + 3y) - 2x}{4(2x + y) + 4x}$$

A. $\frac{2x + 9y}{6x + 2y}$ B. $\frac{x + 9y}{3x + 2y}$
C. $\frac{4x + 18y}{12x + 4y}$ D. $\frac{4x + 3y}{12x + y}$

24. What is the value of

$$\frac{2p - q + r}{n}$$

Where $r = 5$, $n = 2r$, $p = r + 9$ and $q = p - 6$?

A. $1\frac{1}{2}$ B. 15

C. 7 D. $2\frac{1}{2}$

25. What is the value of n in the equation?

$$\frac{2n - 3}{3} + 2n = 5$$

A. $2\frac{1}{4}$ B. 1

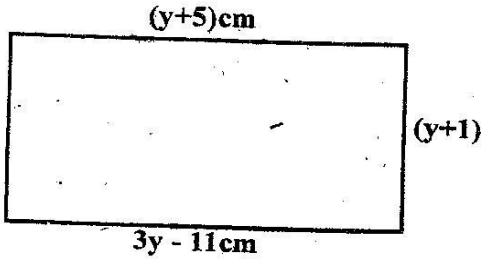
C. $1\frac{1}{2}$ D. 2

26. Ali bought 2n apples while Mulwa bought 4r apples. Halima bought 2 more apples than a half of total number of apples bought by both Ali and Mulwa. How many apples did they buy altogether ?

A. $3n + 6r + 2$ B. $4n + 8r + 2$

C. $6 + 12r + 2$ D. $3n + 6r - 2$

27. The figure below is a rectangle



What is the perimeter of the rectangle ?

A. 22 cm B. 28 cm

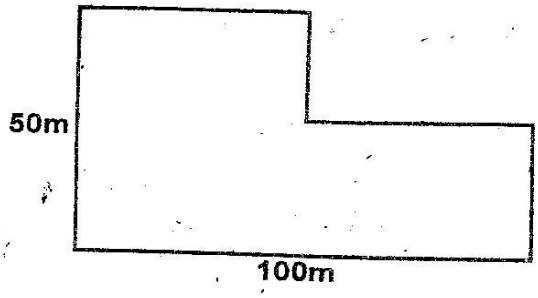
C. 44 cm D. 14 cm

28. A circular flower garden was fenced by three equal strands of wire whose total length was 396 m. What was the radius of the plot ?
(Take $\pi = \frac{22}{7}$)

A. 126 m B. 63 m

C. 42 m D. 21 m

29. The diagram below represents Owiri's plot of land . He put a fence around it. How many posts did he use if the spacing between the posts was 2.5 metres ?



A. 120 B. 121

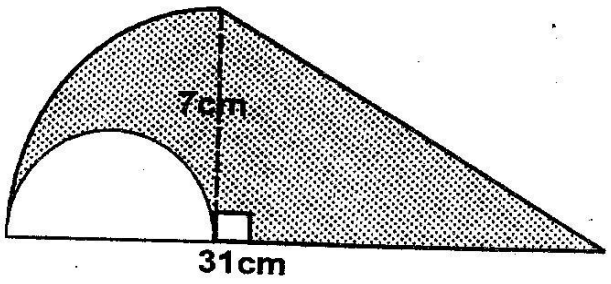
C. 60 D. 300

30. A rectangle 25 cm long and 24 cm wide has the same area as a triangle whose height is 20 cm. What is the length of the base of the triangle?

A. 15 cm B. 30 cm

C . 60 cm D. 300 cm

31. Calculate the area of the shaded region in the figure below (Take $\pi = \frac{22}{7}$)



A. 122. 5 cm^2 B. 45. 5 cm^2

C. 141. 75 cm^2 D. 103. 25 cm^2

32. A vegetable garden is made up of a square of length 15 m and four semicircles each of diameter 4.2 m. What is the area of the garden in square metres ?(Take $\pi = \frac{22}{7}$)

A 69. 6

B. 252. 72

C. 225

D. 335. 88

33. A farmer harvested 240 bags of wheat in one season . In the second season the yield decreased in the ratio 3 : 4 .The farmer supplied all the bags harvested in the second season equally to four millers . How many bags of wheat did each millier get ?

A 180 B. 45
C. 60 D. 80

34. Eight men working at the same rate can unload a lorry in 3 hours .If 2 of the men are absent , how many more hours will the unloading take ?

A. 21 B. 9
C. 4 D. 1

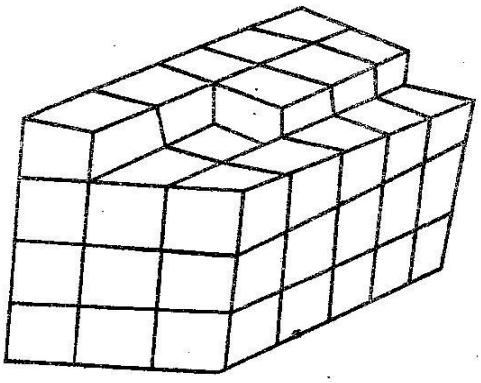
35. The mean mass of four pupils was 49. 5 kg. When the masses of another two pupils were included the mean mass became 53 kg. If the mass of the two pupils were equal, what was the mass of each pupil ?

A. 60 kg B. 120 kg
C. 62 kg D. 31 kg

36. What is the surface area of a cylindrical rod of height 25 cm and diameter14 cm.
(Take $\pi = {}^{22}/_{7}$)

A. 1100 cm^2 B. 3850 cm^2
C. 1254 cm^2 D. 1408 cm^2

37. How many blocks are used to make the stack drawn below ?



A. 60 B. 55
C. 53 D. 45

38. A school received 240 litres of milk packed into 5 decilitre packets . If the packets were in crates each holding 24 packets, how many crates were received ?

A. 20 B. 48
C. 10 D. 2

39. A cylindrical solid of height 20 cm and diameter 14 cm is cut into two equal parts along the diameter. What is the volume of each part in cm^3 (**Take** $\pi = {}^{22}/_{7}$)

A. 3080 B. 440
C. 1540 D 385

40. A rectangular tank of height 2.0 m has a base measuring 1.2 m by 2.5 m. After a day use the level of water fell to 1.5 m. How many litres of water were used?

A. 3600 B. 2700
C. 900 D. 4500

41. A pick- up whose mass is one tonne when empty was loaded with 30 bags of rice each weighing 50 kg and 6 bags of maize each weighing 90 kg. What was the total mass in tonnes of the loaded pick- up ?

A. 2. 04 B. 2. 59
C. 3. 04 D. 2. 5

42. A shopkeeper spent sh 960 to buy 24 cups and then sold them making a profit of 25% .For how much did the shopkeeper sell each cup ?

A. sh 30
B. sh 40
C. sh 50
D. sh 1200

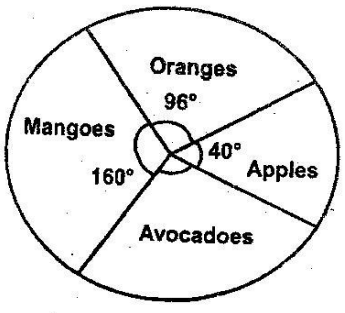
43. Muoki had money as follows:
3 notes of sh 1000
5 notes of sh 500
15 notes of sh 200
12 notes of sh 100
11 notes of sh 50
She changed all the money to five shilling coins. How many five- shilling coins did she get ?
A 10250 B 370
C. 64950 D. 2050

44. The price of an item was reduced by sh 360. This represents a 20% discount. What was the price of the item before the discount?
A. sh 450 B. sh 1440
C. sh 1800 D. sh 2160

45. Kirui bought a radio on hire purchase terms. He paid a deposit of sh 3600 and eight equal monthly instalments of sh 750 .The total amount paid was 20% more than the cash price. What was the cash price of the radio?
A. sh 11520 B. sh 7680
C. sh 8000 D. sh 9600

46. A business lady borrowed sh 30000 from a lending institution at a simple interest rate of 2.5% per month. How much did she pay back at the end of one year ?
A. sh 90000 B. sh 39000
C. sh 750 D. sh 30750

47. The pie- chart below shows the angles of sectors representing the different type of fruits sold by a vendor

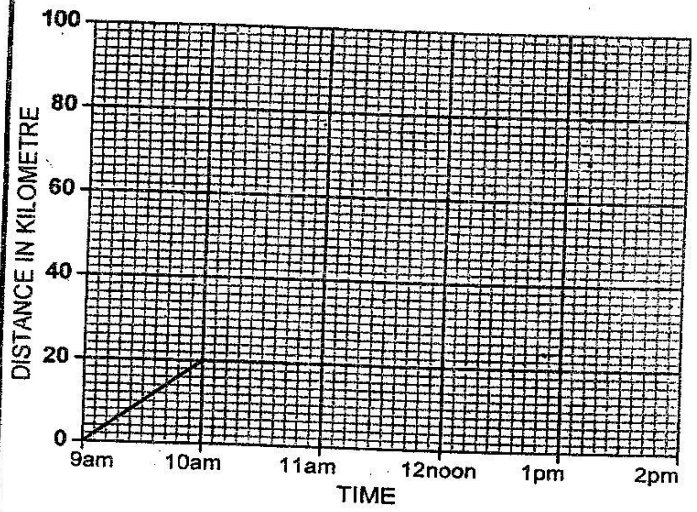


If she sold 80 avocados, how many more mangoes than apples did she sell ?
A. 150 B. 200
C. 50 D. 250

44. On a map of scale 1 : 20000 a rectangular plot of land ,measures 4 cm by 3 cm. What are the actual length of the plot in metres ?
A 80000 by 60000
B. 800 by 600
C. 80 by 60
D. 8 by 6

49. A matatu left town K for town M a distance of 80 kilometres at 9. 30 am. For the first 50 minutes it travelled at 66 km/h .It travelled the remaining distance at 50 km/h . At what time did the matatu reach town M
A. 10.10 am
B. 10.20 am
C. 10. 50 am
D. 11. 12 am

50. The graph below shows part of Mukeku's 70 km journey . After the one- hour rest, he continued at the same speed.



At what time did he complete the journey ?
A 11. 00 am
B. 12. 30 pm
C. 1.30 pm
D. 2. 30 pm