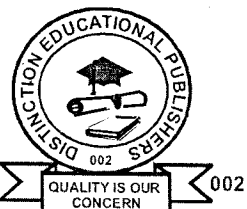


# DISTINCTION SCHOOL BASED ASSESSMENT TEST

## STANDARD EIGHT - 2020

### MATHEMATICS



Time: 2Hrs

1. Which one of the following is **10,057,204** in words?
  - A. Ten million five hundred and seven thousand two hundred and four.
  - B. One million fifty seven thousand two hundred and four.
  - C. Ten million fifty seven thousand two hundred and four.
  - D. Ten million fifty seven thousand two hundred and forty.
2. What is **10.09952** rounded off to 3 decimal places?
  - A. 10.000
  - B. 10.100
  - C. 10.1
  - D. 10.099
3. How many nights are there between **12<sup>th</sup> July** and **12<sup>th</sup> September**?
  - A. 59
  - B. 60
  - C. 61
  - D. 62
4. What is the place value of digit **7** in the number **427365**?
  - A. Hundreds
  - B. Seven thousand
  - C. Ten of thousands
  - D. Thousands
5. What is half the value of;
 
$$\frac{12(8 - 13 + 16) + 2}{6}$$
  - A. 12
  - B. 24
  - C.  $22\frac{1}{3}$
  - D.  $11\frac{1}{6}$
6. The figure below shows a parallelogram **ABCD**, angle **ACD = 68°** and **DAC = 62°**.
 

Find angle **ABC**.

  - A. 68°
  - B. 62°
  - C. 50°
  - D. 56°
7. What is the square of **4.2** as a fraction?
  - A. 17.64
  - B. 16.4
  - C.  $16\frac{11}{15}$
  - D.  $17\frac{16}{25}$
8. What is the next number in the pattern below? **0.2, 0.3, 0.5, 0.7, \_\_\_\_\_**
  - A. 0.9
  - B. 1.0
  - C. 1.1
  - D. 1.3
9. The perimeter of a rectangular plot is **280m**. The width is **60m**. What is the length of the plot?
  - A. 80m
  - B. 70m
  - C. 110m
  - D. 160m
10. Mugo bought the following items from a shop:
  - $2\frac{1}{2}$  kg of meat at Shs. 220.**
  - 2-500g packets of tea leaves for Shs. 340.**
  - 4 - 2kg packets of flour @ Shs. 120.**
  - $\frac{1}{4}$  kg of sugar @ Shs. 80.**

How much did he pay for the items?

  - A. Shs. 1450
  - B. Shs. 1390
  - C. Shs. 760
  - D. Shs. 1290
11. Simplify:  $\frac{3}{4}(16y + 12x) + \frac{1}{2}(8y - 4x)$ 
  - A.  $7x + 16y$
  - B.  $16y - 7x$
  - C.  $12y + 9x$
  - D.  $12y - 9x$
12. What is the value of;
 
$$\frac{2}{5} \text{ of } \left(\frac{1}{10} + \frac{1}{4}\right) \div \frac{1}{5} - \frac{2}{3}?$$
  - A.  $\frac{1}{15}$
  - B.  $\frac{1}{30}$
  - C.  $\frac{11}{15}$
  - D.  $1\frac{4}{15}$
13. Arrange the fraction  $\frac{2}{3}$ ,  $\frac{6}{7}$ ,  $\frac{3}{4}$  and  $\frac{7}{12}$  in ascending order.
  - A.  $\frac{6}{7}$ ,  $\frac{3}{4}$ ,  $\frac{2}{3}$ ,  $\frac{7}{12}$
  - B.  $\frac{7}{12}$ ,  $\frac{6}{7}$ ,  $\frac{3}{4}$ ,  $\frac{2}{3}$
  - C.  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{6}{7}$ ,  $\frac{7}{12}$
  - D.  $\frac{7}{12}$ ,  $\frac{2}{3}$ ,  $\frac{3}{4}$ ,  $\frac{6}{7}$
14. Three bells ring at intervals of **9 minutes**, **12 minutes** and **15 minutes** respectively. If they rang together at **8:50am**. At what time had they rung earlier together again?
  - A. 11:50am
  - B. 1:50pm
  - C. 5:50am
  - D. 8:47am

15. Below is a bus timetable from town A to town F.

**Town A to Town F**

Station	Departure or arrival	Time
		7:00am
A	Departure	7:00am
B	Arrival	7:30am
C	Arrival	10:45am
C	Departure	11:05am
D	Arrival	12:25am
E	Arrival	1:30pm
E	Departure	1:45pm
F	Arrival	3:30pm

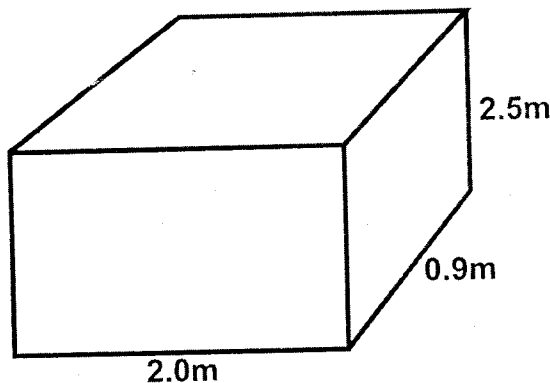
How long did the bus take to travel from town C to town E?

- A. 2hrs 45 min  
B. 2hrs 40 min  
C. 3 hours  
D. 2hrs 25 min

16. Kanini shop gives 10% discount on all items priced above Shs. 500. Teresa bought a pair of shoes priced Shs. 800, a bag whose marked price was Shs. 500 and a T-shirt whose marked price was Shs. 350. How much did he pay for the items?

- A. Shs. 1520  
B. Shs. 1570  
C. shs. 1485  
D. Shs. 1650

17. The rectangular container below has water to a height of 1.5m.



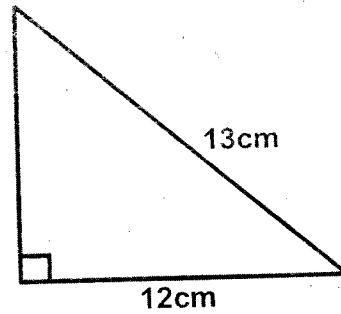
How much water in liters is needed to fill the container?

- A. 1800  
B. 4500  
C. 2700  
D. 1000

18. Which one of the statements below is correct about a rhombus?

- A. All sides are equal.  
B. Diagonals are equal.  
C. Its diagonals are angle bisectors.  
D. Diagonals meet at a right angle.

19. What is the area of the right angled triangle below?



- A. 78cm<sup>2</sup>  
B. 60cm<sup>2</sup>  
C. 30cm<sup>2</sup>  
D. 156cm<sup>2</sup>

20. What is the value of y in the equation?

$$\frac{3y + 4}{2} - \frac{1}{2} = 3$$

- A. 1  
B. 5  
C. 4  
D. 0.5

21. The table below shows the number of pairs of shoes sold each month for six months.

Month	Jan	Feb	Mar	Apr	May	June
Pair sold	32	41	28	31	30	36

What was the average sales of the shoes?

- A. 198  
B. 33  
C. 33.7  
D. 35

22. Construct triangle PQR, line PQ = QR = 7cm. Angle PQR = 60°. Draw a circle touching the vertices of the triangle. What is the radius of the circle?

- A. 4cm  
B. 2cm  
C. 8cm  
D. 3.5cm

23. 14 workers were hired to complete a certain work in 8 days. If half of the workers failed to report. How many days did it take to complete the work?

- A. 4  
B. 10  
C. 16  
D. 2

24. Which one of the following sets of measurements will form a right angled triangle?

- A. 9cm, 16cm, 25cm  
B. 10cm, 24cm, 26cm  
C. 5cm, 12cm, 17cm  
D. 7cm, 2.4cm, 2.5cm

25. What is the sum of faces, edges and vertices on an open cuboid?

- A. 25  
B. 26  
C. 20  
D. 23

26. A kiosk owner bought five-80kg bags of sugar and repacked it in 500g packets. How many packets did he obtain?

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

27. In the year 2010 Rotich harvested **2400** bags of wheat, the year that followed the harvest decreased to **1800** bags due to bad weather. What was the percentage decrease?

- A. 75%                                      B. 25%  
C.  $33\frac{1}{3}\%$                                       D. 20%

28. Tamara bought **15** machines. Three machines were stolen and she sold the rest at **Shs. 3500** each. Making a profit of **25%**. How much had she bought each machine?

- A. Shs. 2800                                      B. Shs. 3000  
C. Shs. 3200                                      D. Shs. 2240

29. A class has **28** pupils. The table below shows the number of pupils absent in one week.

Days	Mon	Tue	Wed	Thur	Fri
Boys	4	3	2	3	1
Girls	1	3	3	4	1

What was the mode of the pupils present that week?

- A. 5    B. 23  
C. 25    D. 22

30. A trader deposited **Shs. 25000** in a bank that paid simple interest at a rate of **12%** per annum. After sometime, he withdrew all his money which amounted to **Shs. 29500**. After how long did he withdraw the money?

- A.  $1\frac{1}{2}$  years                                      B.  $3\frac{1}{2}$  years  
C.  $2\frac{1}{2}$  years                                      D. 10.5 years

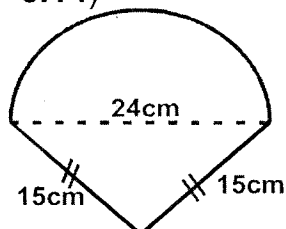
31. In a chief Baraza the number of women was three times that of men. The number of children was **400** less than the total number of both men and women. There were a total of **2000** people altogether. How many children were there in the meeting?

- A. 600    B. 200  
C. 800    D. 400

32. Work out:  $0.25 \times 0.3 - 20 \div 1000 =$

- A. 0.55    B. 5.5  
C. 0.055    D. 0.0199

33. What is the area of the figure below? (Take  $\pi = 3.14$ )

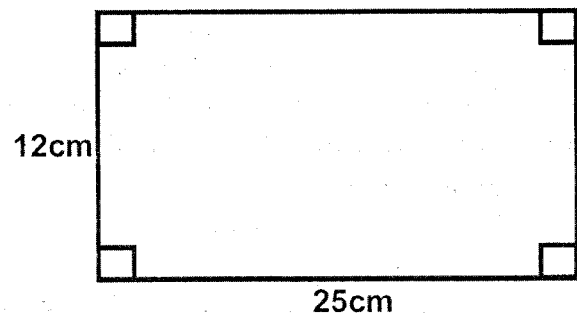


- A.  $334.08\text{cm}^2$                                       B.  $226.08\text{cm}^2$   
C.  $406.08\text{cm}^2$                                       D.  $560.16\text{cm}^2$

34. The marked price of a refrigerator is **Shs. 23000**. The hire purchase price is **20%** more than the marked price. A customer bought it on hire purchase by paying a deposit of **Shs. 5000** and monthly installments of **Shs. 2260** each month. How many months did he pay the monthly installments?

- A. 20 months                                      B. 11 months  
C. 10 months                                      D. 8 months

35. The rectangle drawn below as the same area as a triangle whose height is **10cm**.



What is the base length of the triangle?

- A. 120cm    B. 30cm  
C. 300cm    D. 60cm

36. A sales agent is paid a basic salary of **Shs. 6000**. She is also paid a commission of **2%** for the sales she make above **Shs. 100,000** in a certain month she sold goods worth **Shs. 520000**. How much did she earn altogether?

- A. Shs. 8400    B. Shs. 10400  
C. Shs. 14400    D. Shs. 16400

37. The scale used in a map is **1:2000**. Calculate the area of a circle whose radius is **7cm** in hectares?

- A. 61600    B. 616  
C. 6.16    D. 3.08

38. Tyron and Sheila shared some money in the ratio **3:5**, if Shailla got **Shs. 480** more than Tyron. How much did they have together?

- A. Shs. 1280    B. Shs. 1920  
C. Shs. 768    D. Shs. 1820

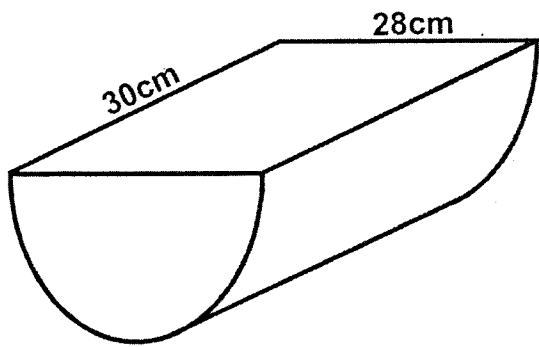
39. The diagonals of a rhombus are **16cm** and **18cm** respectively. Find its area.

- A.  $144\text{cm}^2$     B.  $72\text{cm}^2$   
C.  $288\text{cm}^2$     D.  $96\text{cm}^2$

40. Karimi earns **Shs. 31500** every month. He spends  $\frac{4}{7}$  of the salary on food,  $\frac{1}{3}$  of the remainder on fare and clothing and saves the rest. How much does he save?

- A. Shs. 18000    B. Shs. 13500  
C. Shs. 9000    D. Shs. 4500

41. The figure below shows a solid ( $\pi = \frac{22}{7}$ ).



- What is its surface area
- A. 4096cm<sup>2</sup>
  - B. 2776cm<sup>2</sup>
  - C. 2468cm<sup>2</sup>
  - D. 1936cm<sup>2</sup>

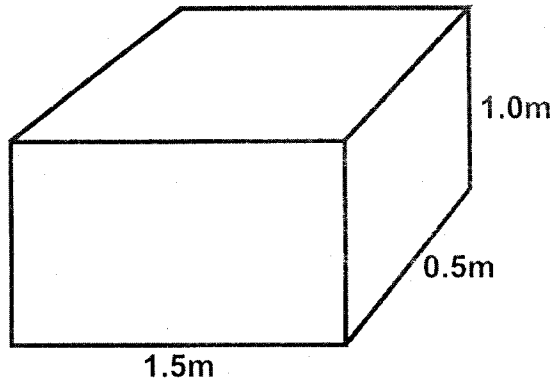
42. Jerome shared his **18ha** of land to his four children as follows **0.26**, **0.29**, **0.14** and **0.21**. How many hectares of land did he remain with?

- A. 1.8
- B. 2
- C. 0.1
- D. 0.2

43. A motorist started his journey at **11:30am**. He travelled upto **1:30pm**, covering **120km**. He then changed his speed to **80km/h** for **2** hours. What was his average speed for the whole journey?

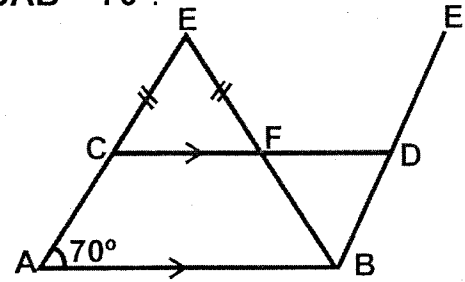
- A. 60km/h
- B. 70km/h
- C. 80km/h
- D. 65km/h

44. The rectangular tank drawn below was filled using **50-litre** container. How many such containers will be required to fill the container?



- A. 150
  - B. 15
  - C. 1500
  - D. 5
45. Convert **0.045m<sup>3</sup>** to **cm<sup>3</sup>**.
- A. 4.5
  - B. 450
  - C. 45
  - D. 45000
46. Construct triangle **XYZ**, where line **ZY = 5.5cm**, angle **XYZ = 80°** and **YXZ = 60°**. What is the measure of line **XY**?
- A. 6.3cm
  - B. 8.4cm
  - C. 7.4cm
  - D. 4.0cm

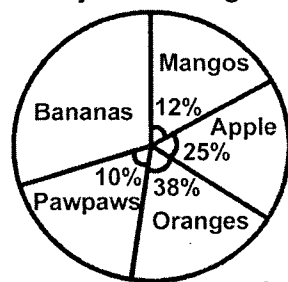
47. In the figure below line **AB** is parallel to line **CD**, line **EC** and **EF** are equal. Angle **CAB = 70°**.



What is the measure of angle **DFB**?

- A. 70°
- B. 110°
- C. 120°
- D. 95°

48. The pie-chart below shows the number of fruits Njeras bought for sale one day.



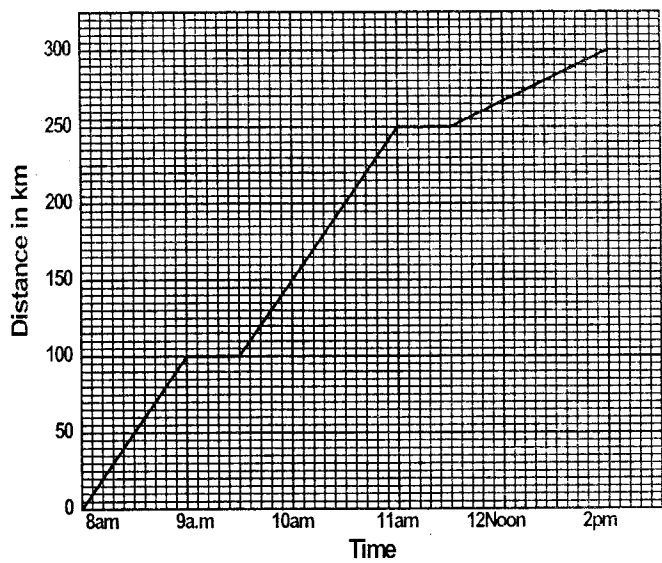
She bought a total of **6500** fruits. How many more bananas than the pawpaws did she buy?

- A. 975
- B. 325
- C. 1625
- D. 195

49. A shopkeeper had **Shs. 6000**. He changed all the money into equal numbers of **Shs. 100** and **Shs. 200**. How many notes did he get altogether?

- A. 20
- B. 40
- C. 10
- D. 30

50. The graph below shows the journey of a motorist.



What was the average speed for the whole journey?

- A. 54  $\frac{3}{55}$  km/h
- B. 50km/h
- C. 70km/h
- D. 60km/h