DISTINCTION SCHOOL BASED ASSESSMENT TEST
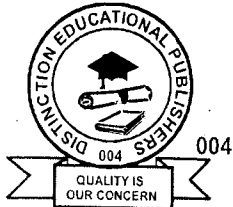## STANDARD SEVEN - 2021
MATHEMATICS

7
**PREMIER**

Time: 2 Hours

1. Which one of the following is **16245005** in words?
   A. Sixteen million two forty five thousand and five
   B. One million six hundred and twenty four thousand five hundred and five
   C. Sixteen million two hundred and forty five thousand and five
   D. Sixteen million two hundred and forty five thousand five hundred.

2. How many groups of thousands are there in the value of digit 4 in the number 645937?
   A. 40000   B. 4000
   C. 400   D. 40

3. What is the **HCF** of **36, 48** and **12**?
   A. 6   B. 12
   C. 144   D. 24

4. What is the value of **2.5555 + 2.4444** rounded off to the nearest thousandths?
   A. 5.000   B. 5
   C. 5.00   D. 4.999

5. How many days are there from **2ⁿᵈ** January to 6ᵗʰ April in the year 2012?
   A. 97   B. 96
   C. 95   D. 94

6. What is the place value of digit **9** in the number **65973**?
   A. Thousands   B. Hundreds
   C. Tens   C. 900

7. What is the next number in the series below.
   $\frac{11}{32}, \frac{11}{16}, 1\frac{3}{8}, 2\frac{3}{4}$

   A. $5\frac{1}{2}$ B. $5\frac{1}{4}$

   C. $4\frac{1}{2}$ D. $3\frac{3}{4}$

8. Which one of the following number is divisible by **11**?
   A. 9880   B. 7226
   C. 966   D. 6578

9. Work out: $\frac{5.12 \times 4.2 \times 0.95}{0.19 \times 0.14 \times 32}$

   A. 0.24   B. 2.4
   C. 24   D. 240

10. What is the circumference of the figure below?
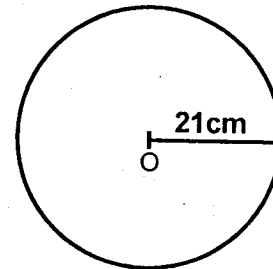
   A. 66cm   B. 132cm
   C. 33cm   D. 42cm

11. What is the area of the shaded part in the figure below?
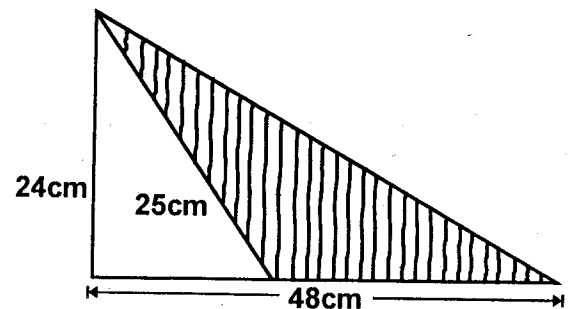
   A. 1152cm²   B. 660cm²
   C. 576cm²   D. 492cm²

12. Simplify: $\frac{1}{4}(32x + 16y) - 2(2x - 4y)$
   A. 4x + 12y
   B. 4x - 4y
   C. 4x -12y
   D. 4x + 4y

13. In a class, **25%** of the pupils are boys. If there are **80** pupils altogether. How many more girls than boys are there?
   A. 20   B. 40
   C. 60   D. 10
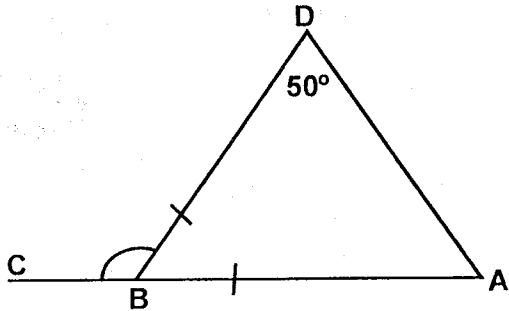
14. Mary slept for **5** hours. If she slept at **2245**hrs. At what time did she wake up?
   A. 3.45am   B. 3.45pm
   C. 1745hrs   D. 1545hrs

15. Find the square root of $1\frac{49}{576}$

   A. $\frac{24}{25}$ B. $1\frac{7}{24}$

   C. $1\frac{1}{24}$ D. $1\frac{1}{25}$

16. In the figure below, what is the measure of angle **DBC**?


- A. 100°
- B. 80°
- C. 130°
- D. 150°

17. In a school there were **560** pupils. **5%** of the pupils transferred. The remaining pupils were given **6** exercise book each. How many books were given altogether?
- A. 3360
- B. 3528
- C. 532
- D. 3192

18. What is the value of **x** in the equation?
$\frac{2}{5}x + 11 = 31$
- A. 105
- B. 50
- C. 8
- D. $16\frac{4}{5}$

19. The area of the square below is $12\frac{1}{4}m^2$. Find it's perimeter.
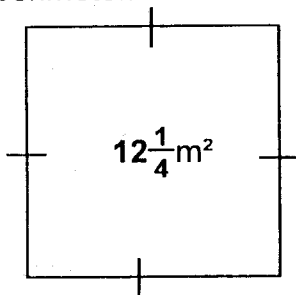
- A. $3\frac{1}{2}m$
- B. 7m
- C. 14m
- D. 49m

20. There are **34** pupils in a class. Each pupil is given **2-2dl** packets of milk twice per week. How many litres of milk does the pupils take in two weeks?
- A. 27.2
- B. 13.6
- C. 54.4
- D. 108.8

21. A bicycle wheel has a diameter of **56cm**. It makes **4000** revolutions. What distance did it cover?
- A. 704km
- B. 7.04km
- C. 704000km
- D. 70.4km

22. Given that **k = 4**, **b = 5** and **w = 2**, work out the value of
$\frac{4k + w}{2b - 1}$
- A. 2
- B. 4
- C. 1
- D. 16

23. The rectangular tank below measures **0.4m** by **0.5m** by **60cm**. What is its capacity in litres?
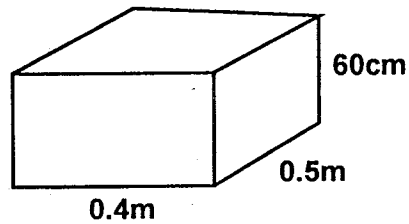
- A. 012
- B. 12
- C. 120
- D. 12000

24. Teressia sold a pair of trousers for sh. **1200** making a profit of **20%**. How much was the profit?
- A. sh. 1000
- B. sh. 100
- C. sh. 400
- D. sh. 200

25. A rectangular photograph measuring **15cm** by **20cm** was put on a frame leaving a uniform margin of **2cm** all around. What is the area of the margin?
- A. 300cm²
- B. 74cm²
- C. 156cm²
- D. 456cm²

26. A pupil constructed a figure with the following properties.
   i) *All the sides are equal*
   ii) *All angles are equal*
   iii) *The sum of all interior angles add upto* **180°**
   The figure is likely to be
- A. square
- B. right angled
- C. equilateral triangle
- D. isosceles triangle

27. After paying sh. **16000** for a machine, Mugo was told he is remaining with **20%** to clear all the money for the machine. How much was the total price for the machine?
- A. sh. 20000
- B. sh. 3200
- C. sh. 19200
- D. sh. 4000

28. In the figure below line **AB** is parallel to line **CD**.
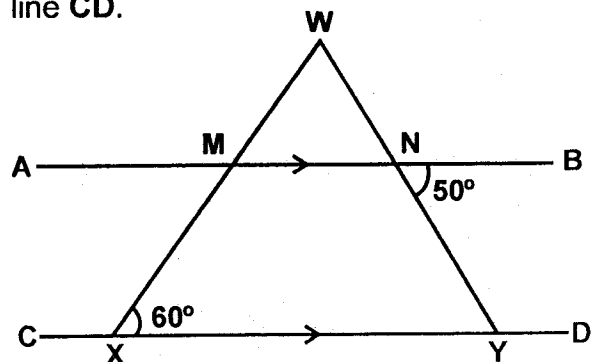
What is the measure of angle **MWN**?
- A. 50°
- B. 60°
- C. 70°
- D. 130°

29. Salim is **5** years older than his sister Maria. If Maria is **w** years old now, what will be their sum ages **5** years to come?
A. 2w + 15 years
B. 2w + 10 years
C. 2w + 5 years
D. w + 10 years

30. A farmer used a rope **14m** long to tie his goat for grazing on a piece of land. What is the possible longest distance can the goat cover after going round once?
A. 616m   B. 28m
C. 154m   D. 88m

31. Work out $3\frac{3}{5} \times (2\frac{2}{3} - \frac{1}{3} \div \frac{1}{6})$

A. $8\frac{14}{15}$ B. $2\frac{2}{5}$

C. $12\frac{3}{5}$ D. $48\frac{2}{5}$

32. Work out:

	L	dl	ml
	15	8	80
x			5

A. 75l   40dl   400ml
B. 75l   44dl
C. 79l   4dl
D. 79l   4dl   4ml

33. A farmer harvested **120** bags of maize. He sold **50**% of the bags and donated **20** bags to the orphans. How many bags of maize did he remain with?
A. 30   B. 40
C. 60   D. 20

34. Stanley bought the following items from a shop.
3 packets of milk at sh. **50**
$1\frac{1}{2}$kg of sugar @ sh. **120**
2 - 2kg packets of flour at sh. **110**
3 bars of soap for sh. **330**

How much did he pay for the items
A. sh. 880
B. sh. 1540
C. sh. 1100
D. sh. 780

35. A shopkeeper had **2** tonnes of sugar. He repacked all the sugar into small bags of **35**kg each. How many full bags did he fill with the sugar?
A. $57\frac{1}{7}$ B. 67
C. 58   D. 57

36. A trader sold an item for sh. **2500** making a profit of sh. **500**. What was the percentage profit?
A. 20%   B. 25%
C. 30%   D. $16\frac{2}{3}$

37. The perimeter of the rectangle below is **280m**. The length measures **80m**. What is its area in ares?

80m
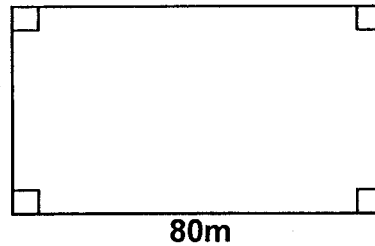
A. 96   B. 4800
C. 48   D. 60

38. Supaki read $\frac{2}{5}$ of a book on Monday, $\frac{1}{3}$ on Tuesday and the rest on Wednesday. If the book had **150** pages. How many pages did he read on Wednesday?
A. 110   B. 40
C. 60   D. 90

39. Construct triangle **ABC** where line **AB = 7cm**, **BC = 8cm** and angle **BAC = 70°**. What is the measure of angle **BCA**?
A. 124°   B. 130°
C. 50°   D. 56°

40. Covert $\frac{1}{6}$ into decimal and round it off to **3** decimal places.
A. 1.667   B. 0.167
C. 0.166   D. 1.666

41. The area of the triangle below is **60m²**. What is its perimeter if the base line is **8m**?

8m
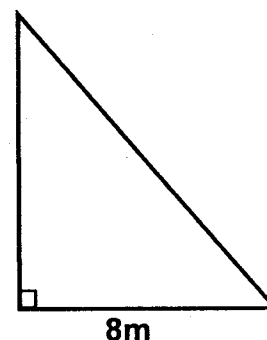
A. 15m   B. 60m
C. 23m   D. 40m

42. The distance from Nairobi to Thika is **120km**. A vehicle left Nairobi at **8.30am** and arrived Thika at **10.00am**. What was its speed in **km/h**?
A. 120km/h   B. $1\frac{1}{2}$km/h
C. 80km/h   D. 90km/h

43. The volume of a cuboid is **96**cm³. It has a square base measuring **4**cm. What is its height?
A. 24cm B. 12cm
C. 8cm D. 6cm

44. Arrange $\frac{4}{5}$, $\frac{7}{10}$, $\frac{5}{6}$ and $\frac{11}{15}$ in an ascending order.

A. $\frac{5}{6}$, $\frac{4}{5}$, $\frac{11}{15}$, $\frac{7}{10}$
B. $\frac{7}{10}$, $\frac{11}{15}$, $\frac{4}{5}$, $\frac{5}{6}$

C. $\frac{4}{5}$, $\frac{5}{6}$, $\frac{7}{10}$, $\frac{11}{15}$
D. $\frac{11}{15}$, $\frac{7}{10}$, $\frac{5}{6}$, $\frac{4}{5}$

45. Find the area of the figure below in **m²**

(3x + 10)m

(3x)m

(5x + 2)m

A. 264 B. 4
C. 68 D. 132

46. A length of **2.5**km was represented on a map by a line of **5**cm. What was the scale used?
A. 1:5000
B. 1:50000
C. 1:500000
D. 125000

47. The pie chart below shows how Tinina used his **9.6** hectares of land.

How many hectares of land are used to grow potatoes?
A. 2.4 B. 0.24
C. 3.6 D. 4.8

48. What is the sum of vertices, edges and faces of an open cuboid?
A. 26 B. 25
C. 27 D. 18

49. The table below shows the number of boys and girls absent in a class of **48** pupils in one week.

Days	Mon	Tue	Wed	Thu	Fri
Boys	2	3	4	5	5
Girls	2	3	2	4	5

Which day had the least number of pupils present?
A. Monday B. Tuesday
C. Friday D. Thursday

50. The graph below shows the journey of a motorist from town **K** to town **M**.

How many kilometres did he cover between **11.00am** and **2.30pm**?
A. 300km B. 100km C. 200km D. 150km