

# STANDARD 8 MID TERM 2 EXAM 2019

## MATHEMATICS

Time : 2 hours

- Write five million, five hundred and five thousand and fifty five and eight thousandth in numerals.  
 A. 5 505 505.08  
 B. 5 505 055.8  
 C. 5 505 055.008  
 D. 5 055 055.08
- Which of the following will be the largest number formed by the digits 9, 7, 4, 8 and 0?  
 A. 89 704  
 B. 98 740  
 C. 40 978  
 D. 90 784
- In 2016, Bancy harvested 8 942 bags of maize. This was 268 bags more than those harvested in 2015. How many bags were harvested in the two years?  
 A. 8 674  
 B. 9 210  
 C. 18 364  
 D. 17 616
- What is the value of  $(18\ 325 - 1\ 600 + 1\ 243 - 1\ 438) \div 5$ ?  
 A. 16 530  
 B. 6 428  
 C. 3 306  
 D. 7 535
- What is 5 234 281 rounded off to the nearest thousand?  
 A. 5 235 000  
 B. 5 234 000  
 C. 5 234 300  
 D. 5 200 000
- What is 98.43752 correct to two decimal places?  
 A. 98.438  
 B. 98.40  
 C. 98.44  
 D. 98.00
- The area of a square plot of land is  $7\frac{9}{16}m^2$ . What is the length of one side of the plot?  
 A. 2.25m  
 B. 2.375m  
 C. 2.50m  
 D. 2.75m
- What is the value of  $\frac{\frac{1}{7} \text{ of } (\frac{1}{5} + \frac{1}{4}) + \frac{1}{2}}{\frac{1}{2} + \frac{1}{4}}$ ?  
 A.  $1\frac{1}{5}$   
 B.  $3\frac{1}{5}$   
 C.  $1\frac{1}{3}$   
 D.  $2\frac{1}{4}$
- How many times is the value of digit 8 more than the value of digit 2 in the number 984 321?  
 A. 40 000  
 B. 4 000  
 C. 400  
 D. 40
- Which is the correct order of the fractions  $\frac{2}{3}, \frac{1}{2}, \frac{3}{5}$  and  $\frac{1}{4}$  from the largest to the smallest?  
 A.  $\frac{2}{3}, \frac{3}{5}, \frac{1}{4}, \frac{1}{2}$   
 B.  $\frac{2}{3}, \frac{1}{4}, \frac{3}{5}, \frac{1}{2}$   
 C.  $\frac{3}{5}, \frac{2}{3}, \frac{1}{2}, \frac{1}{4}$   
 D.  $\frac{3}{5}, \frac{1}{4}, \frac{2}{3}, \frac{1}{2}$
- What is the place value of digit 3 in 683 421?  
 A. Tens of thousands  
 B. Hundreds of thousands  
 C. Hundreds  
 D. Thousands
- Which of the following is the next number in the pattern below?  
 4, 9, 25, 49, \_\_\_\_  
 A. 121  
 B. 100  
 C. 81  
 D. 169
- In the figure below, lines PQ and RS are parallel. Line MN and UV are transversals.  

Which of the following statements is true about the figure above?  
 A. Angle d and f are co-interior angles.  
 B. Angle k and o are corresponding angles.  
 C. Angle e and h are vertically opposite angles.  
 D. Angle l and m are alternate angles
- Three bulbs are set to light at intervals of 4 seconds, 6 seconds and 9 seconds respectively. If they light together now, after how many seconds will they light together next?  
 A. 24  
 B. 36  
 C. 18  
 D. 48

15. What is the value of  $\frac{0.51 \times 0.0125}{0.017}$ ?

- A. 3.75  
B. 37.5  
C. 0.0375  
D. 0.375

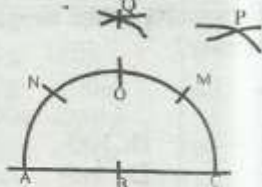
16. A distance of 10 kilometres is represented by a length of 4 centimetres on a map. What is the scale used?

- A. 1:250 000  
B. 1:25 000  
C. 1:2 500 000  
D. 1:2 500

17. Which of the following sets of measurements will form a right angled triangle when constructed?

- A. 6cm, 7cm, 9cm  
B. 7cm, 15cm, 17cm  
C. 5cm, 12cm, 13cm  
D. 5cm, 25cm, 26cm

18. The figure below shows construction of angle PBC which is  $75^\circ$



Which of the following are steps on the construction of the angle?

- A. M, Q, N, O, P  
B. M, N, Q, O, P  
C. M, N, O, Q, P  
D. M, N, P, O, Q

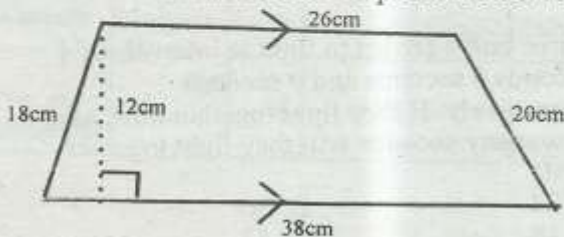
19. Below are characteristics of a figure:

- (i) All angles are equal.  
(ii) Diagonals are varied and bisect each other at right angles.  
(iii) All sides are equal.  
(iv) Interior angles add up to  $180^\circ$

Which of the following are properties of a rhombus?

- A. i, iv  
B. ii, iii  
C. i, ii  
D. i, iii

20. What is the area of the trapezium below?



- A.  $384\text{cm}^2$   
B.  $640\text{cm}^2$

21. A new car costs sh 850 000. After 5 years, its value decreased by 40%. How much is the car after 5 years?

- A. Sh.340 000  
B. Sh.190 000  
C. Sh.510 000  
D. Sh.700 000

22. Which of the following statements is true?

- A.  $\frac{3}{16}$  is less than  $18\frac{3}{4}\%$   
B.  $\frac{3}{16}$  is smaller than  $18\frac{3}{4}\%$   
C.  $\frac{3}{16}$  is greater than  $18\frac{3}{4}\%$   
D.  $\frac{3}{16}$  is equal to  $18\frac{3}{4}\%$

23. A rectangular tank measures 8.5m by 5.5m by 1.2m high. What is the volume of the tank when half full?

- A.  $56\ 100\ 000\text{cm}^3$   
B.  $28\ 050\ 000\text{cm}^3$   
C.  $14\ 025\ 000\text{cm}^3$   
D.  $7\ 012\ 500\text{cm}^3$

24. What is the value of y in the equation  $(y-4)2+y=19$ ?

- A. 12  
B. 7  
C. 9  
D. 6

25. Which one of the following statements is true about the number of edges and vertices of a triangular based pyramid? It has

- A. 4 edges and 6 vertices  
B. 6 edges and 4 vertices  
C. 6 edges and 5 vertices  
D. 9 edges and 6 vertices

26. Habert bought the following items from a shop:

- 3 HB pencils @sh.21.00  
3A4 200pg exercise book @sh. 80.00  
2 rulers for sh.25.00  
3 pens @sh.15.00

If he paid using a sh.500 shilling note, what balance did he receive?

- A. Sh.373.00  
B. Sh.127.00  
C. Sh.273.00  
D. Sh.227.00

27. After an increase of 15%, Tom's salary became sh 24 725.00. How much was his salary before the increase?

- A. Sh. 21 500  
B. Sh. 22 500  
C. Sh. 20 000  
D. Sh. 21 000

28. Taheem bus took 9hrs 45minutes to travel from Nairobi to Mombasa. If it arrived on Saturday at 6.30.am, at what time and day had it left Nairobi?

- A. 8.45am, Friday  
B. 8.45pm, Saturday  
C. 8.45pm, Friday  
D. 8.45am, Saturday

29. The area of a parallelogram is  $850\text{cm}^2$ . If its base length is  $34\text{cm}$ . What is the perpendicular height of the parallelogram?  
 A.  $25\text{cm}$                       B.  $34\text{cm}$   
 C.  $15\text{cm}$                         D.  $24\text{cm}$

30. Nancy tied a circular tank thrice using a string. If the total length of the string used was  $13.2\text{m}$ , what is the area of the bottom of the cylindrical tank?  
 A.  $6.16\text{m}^2$                       B.  $8.8\text{m}^2$   
 C.  $3.08\text{m}^2$                       D.  $1.54\text{m}^2$

31. A passenger bus left Sagana at  $11.45\text{am}$  and arrived at Nyeri at  $1.15\text{pm}$ . If the bus travelled at speed of  $25\text{m/s}$ , how far is Sagana from Nyeri?  
 A.  $180\text{km}$                         B.  $135\text{km}$   
 C.  $90\text{km}$                          D.  $45\text{km}$

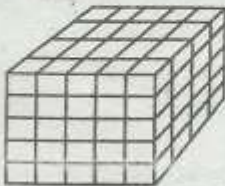
32. Purity and Judy shared some fruits in the ratio of  $3:2$ . If Purity got 15 fruits more than Judy, how many fruits did Judy get?  
 A. 30                                B. 75  
 C. 45                                D. 60

33. Nkirote bought 5 trays of eggs @sh.300 per tray. All eggs in one of the trays broke and she sold the remaining eggs @sh 15.00. What percentage profit did she make if each tray had 30 eggs?  
 A. 10%                              B. 40%  
 C. 15%                              D. 20%

34. Which one of the following represents the ratio  $3:5$  expressed as a percentage?  
 A. 60%                              B. 40%  
 C.  $16\frac{2}{3}\%$                         D.  $83\frac{1}{3}\%$

35. Four men take 10 days to complete a certain job. How many men are required to do the same job in 2 days?  
 A. 10                                 B. 16  
 C. 20                                 D. 24

36. The following stack of cubes was dipped in a bucket of paint.



How many cubes had paint on two faces only?

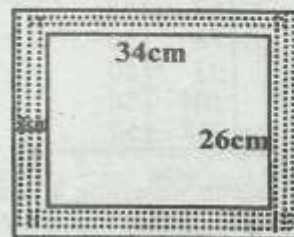
- A. 36                                 B. 100  
 C. 4                                  D. 32

37. Boxes measuring  $10\text{cm}$  by  $8\text{cm}$  by  $6\text{cm}$  were to be packed in a carton measuring  $1.6\text{m}$  by  $2\text{m}$  by  $3\text{m}$ . How many boxes were needed to fill the carton?  
 A. 200 000                        B. 20 000  
 C. 2 000                            D. 200

38. What is the volume of a cylindrical tank of diameter  $2.8\text{m}$  and a height of  $5\text{m}$ ?  
 A.  $30.8\text{m}^3$                       B.  $15.4\text{m}^3$   
 C.  $61.6\text{m}^3$                       D.  $7.7\text{m}^3$

39. A cylindrical solid of height  $20\text{cm}$  and a radius of  $7\text{cm}$  has been cut into two along the diameter. What is the surface area of one half?  
 A.  $1\,540\text{cm}^2$                       B.  $594\text{cm}^2$   
 C.  $440\text{cm}^2$                       D.  $874\text{cm}^2$

40. A rectangular photo measures  $34\text{cm}$  by  $26\text{cm}$ . The photo is framed. A margin of  $2\text{cm}$  all round is left as shown in the diagram below.



What is the area of the margin?

- A.  $256\text{cm}^2$                       B.  $884\text{cm}^2$   
 C.  $1\,140\text{cm}^2$                       D.  $926\text{cm}^2$

41. A playing field measured  $80\text{m}$  by  $60\text{m}$ . The measurements of the sides of the field were increased by  $20\%$  each. What is the new area of the playing field?  
 A.  $4\,800\text{m}^2$                       B.  $5\,760\text{m}^2$   
 C.  $6\,912\text{m}^2$                       D.  $1\,152\text{m}^2$

42. At a school general meeting day, the number of men was half that of women. The number of children was four times that of women. If the number of women who attended was  $2x$ , what is the sum of the people who attended the meeting?

- A.  $10x$                                 B.  $18x$   
 C.  $13x$                                 D.  $11x$

43. A company sold 4.5 tonnes of sugar in 2kg packets. How many packets were sold?  
 A. 1 250                      B. 2 250  
 C. 2 520                      D. 3 350
44. Ochieng paid sh.11 712 for a sewing machine after he was allowed  $8\frac{1}{2}\%$  discount. What was the marked price of the sewing machine?  
 A. Sh. 13 500                  B. Sh. 15 000  
 C. Sh. 12 800                  D. Sh. 12 000
45. A book seller receives a commission of 5% of the value of the sales that he makes. In a certain month, he sold 250 books at sh.480 each. How much was his commission that month?  
 A. Sh. 6 000                      B. Sh. 3 000  
 C. Sh. 9 000                      D. Sh. 12 000

46. The table below shows inland postal charges for letters.

Mass of the letter	Sh	Cts
Upto 20g	35	50
Over 20g -50g	51	50
Over 50g -100g	63	50
Over 100g -250g	78	50
Over 250g -500g	92	50
Over 500g -1kg	104	50
Over 1kg -2kg	137	50

Nkatha posted two letters weighing 86g and another one weighing 600g. How much did she pay at the post office?

- A. Sh. 127.00                      B. Sh. 321.50  
 C. Sh. 431.50                      D. Sh. 231.50

47. Construct triangle PQR such that line PQ= 7cm, line QR= 8cm and angle PQR=  $70^\circ$ . Join point P to R. Construct a circle that touches the vertices. Measure its radius.  
 A. 3.8cm                              B. 4.7 cm  
 C. 2.8cm                              D. 5.8 cm

48. The table below shows the number of animals in a certain orphanage.

Animals	Elephants	Lions	Buffaloes	Giraffes	Rhinos
No. of animals	12	18	15	24	21

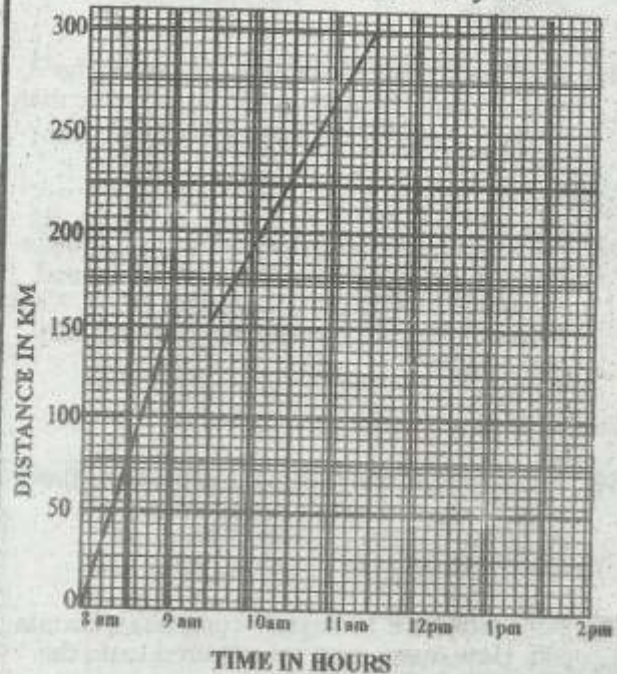
If a pie chart was drawn to represent the information, what angle would represent the buffaloes?

- A.  $90^\circ$                                   B.  $15^\circ$   
 C.  $60^\circ$                                   D.  $84^\circ$

49. Hezron deposited sh. 120 000 in a bank that earns simple interest at the rate of 8% p.a. How much was in his account at the end of  $2\frac{1}{2}$  years?

- A. Sh.144 000  
 B. Sh.154 400  
 C. Sh. 14 400  
 D. Sh. 134 400

50. The following graph shows Onyango's journey from Nyeri to Kisumu by car.



After travelling for one hour, the car got a puncture which took 30 minutes to mend. He later continued with the journey to Kisumu. What was his average speed after the puncture?

- A. 90 km/hr  
 B. 65km / hr  
 C. 85km/ hr  
 D. 75km/ hr