STANDARD EIGHT TERM 2 EXAM 2018

MATHEMATICS

1. Which of the following is sixty million four hundred thousand four hundred and forty?
A. 60040404
B. 60440400
C. 60400440
D. 60400040

2. What is the number 6857.3976 rounded off to the nearest hundredth?
A. 6857.39
B. 6857.40
C. 6900.00
D. 6800.00

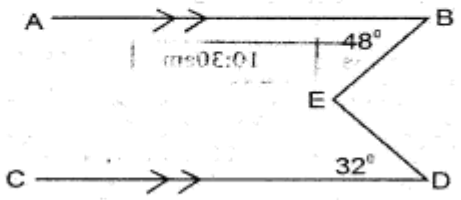
3. What is the place value of digit 3 in the product of 42.6 and 12.6?
A. 30
B. Hundredth
C. Tens
D. 300

4. June was admitted in hospital on 19th January 2018 and was discharged on 4th April the same year. For how many days was June in the hospital?
A. 73
B. 74
C. 76
D. 75

5. What is the value of $\frac{4(6^2-4^2)-8\times6\div3}{4\times6\div3}$?
A. 64
B. 8
C. 16
D. 24

6. Joyreen bought the following items from a shop
3kg rice @ sh. 95
500g tea leaves for sh. 125
3 bars of soap @ sh. 125
2-2kg packets of sugar @ 110 per kg
If she paid using 3-500 shillings notes. How much balance did she get?
A. 275
B. 1225
C. 175
D. 1325

7. If the figure below line **AB** is parallel to line **CD**. Angle **ABE** = 48° and angle **CDE** = 32°.



What is the size of the reflex angle **BDE**?
A. 80°
B. 180°
C. 100°
D. 280°

8. Which one of the numbers below is the value of $\sqrt{\frac{225-144}{3^2}}$?
A. 9
B. 27
C. 81
D. 3

9. What is the next number in the sequence 3, 4, 8, 17, 33, 58, _____ ?
A. 94
B. 36
C. 97
D. 124

10. What is the simplified form of
$3\frac{1}{2}x-\frac{1}{3}(12x-21y)+2\frac{1}{2}x$?
A. 2x - 7y
B. 2x + 7y
C. 10x + 7y
D. 10x - 7y

11. Below is a train timetable from Mombasa to Nairobi

Town	Arrival time	Departure time
Mombasa	-	8.00am
Mazeras	10:30am	11:00am
Mariakani	12:15pm	12:30pm
Voi	1:15pm	1:25pm
Athi river	2:10pm	2:20pm
Nairobi	2:50pm	3:00pm

How long did the train take to travel from Mazeras to Athi river?

A. 8hrs 50min
B. 3hrs 40min
C. 3hrs 20min
D. 3hr 10min

12. The perimeter of a rectangular plot is 360m. The width is 80m. What is the area of the plot in hectares?

A. 100ha
B. 8000ha
C. 0.8ha
D. 80ha

13. Construct a rhombus **ABCD** with line **AB**=6cm and angle **ABC**=55°. What is the length of the longer diagonal?

A. 10.6cm
B. 5.6cm
C. 13cm
D. 6.6cm

14. What is the value of $\frac{1}{3}$ of $\left(\frac{4}{5}+\frac{1}{4}\right)\div\frac{1}{2}$?

A. $\frac{7}{20}$
B. $\frac{7}{10}$
C. $\frac{3}{20}$
D. $\frac{3}{10}$

15. Tamara paid sh. 20400 for a cupboard after getting a 15% discount. What was the marked price of the cupboard?

A. Sh. 17 340
B. Sh. 23 400
C. Sh. 3 060
D. Sh. 24 000

16. Three bells are set to ring at an interval of 8 minutes, 12 minutes and 18 minutes respectively. If they all rang together at 9:20cm, when will they ring together again?

A. 9:32am
B. 10:32am
C. 9:50am
D. 10:20am

17. A rectangular water tank measures 2m long by 1.5m wide by 1.2m high. The tank contain water to a 60cm. How many more litres are required to make the tank ¾ full?

A. 1800*l*
B. 3600*l*
C. 900*l*
D. 2700*l*

18. The fractions $\frac{3}{11}, \frac{5}{8}, \frac{3}{7}$ and $\frac{7}{9}$ are to be arranged in order from the largest to the smallest. Which one of the following is the correct order?

A. $\frac{7}{9}, \frac{5}{8}, \frac{3}{7}, \frac{3}{11}$

B. $\frac{3}{11}, \frac{3}{7}, \frac{5}{6}, \frac{7}{9}$

C. $\frac{5}{8}, \frac{7}{9}, \frac{3}{7}, \frac{3}{11}$

D. $\frac{3}{7}, \frac{7}{9}, \frac{5}{8}, \frac{3}{7}$

19. Which of the following properties is true for both rhombus and a square?

A. Opposite angles adds upto 180^0

B. Diagonals bisect at right angle

C. Diagonals are equal

D. All interior angles adds upto 180^0

20. The table below shows the number of vehicles that passed a certain route in five days.

Day	Mon	Tue	Wed	Thur	Fri
No. of Vehicles	89	63	121	83	114

Which two consecutive days was the mean of the vehicles that passed through the highest?

A. Wednesday and Friday

B. Thursday and Friday

C. Tuesday and Thursday

D. Wednesday and Thursday

21. What is the value of $\frac{(x-2)^2+3y}{z+5}$ if $x = 5$ $y = 4$ and $z = 3$

A. $1\frac{5}{8}$

B. $1\frac{7}{8}$

C. $2\frac{5}{8}$

D. $3\frac{5}{8}$

22. A packet is in form of pyramid with a square base. Which of the following is the correct number of edges and vertices.

	Edges	Vertices
A.	4	4
B.	6	4
C.	8	5
D.	9	6

23. What is the value of **x** in the equation $\frac{3(2x-3)}{4} = \frac{2(2x+5)}{3}$?

A. 6½

B. 33½

C. 7½

D. 19½

24. Fifteen men are set to complete a certain job in 16 hours. How much longer did the work take if three men did not turn up for the job?

A. 20 hours

B. 5 hours

C. 3 hours

D. 4 hours

25. Which of the following sets of measurements will be used to form a right angled triangle?

A. 5cm, 12cm, 15cm

B. 8cm, 15cm, 17cm

C. 5cm, 1.2cm, 1.3cm

D. 7cm, 24cm, 26cm

26. A lorry was loaded with 60 cartons of cooking fat and 50 bags of rice. If each carton had 20 half kilo packets of cooking fat and each bag weighed 75kg. If the empty lorry weighed 2.105 tonnes. What was the mass of the loaded lorry in kg?

A. 600kg

B. 3750kg

C. 4350kg

D. 6455kg

27. Njogu made a 12% loss after selling a cow at sh. 17600. At what price should he have sold the cow to make a 25% profit?
A. Sh. 22000
B. Sh. 20000
C. Sh. 25000
D. Sh. 15488

28. Orumu deposited sh. 120 000 in a commercial bank that gave a compound interest at the rate of 5% p.a. How much interest did his money earn after two years?
A. Sh. 12300
B. Sh. 132300
C. Sh. 12000
D. Sh. 132000

29. At a prayer rally the number of women was 300. The number of boys was twice that of men but 100 more than that of women. The number of girls was 150 more than that of boys. How many people in total attended the prayer rally?
A. 1000
B. 1350
C. 900
D. 1450

30. The marked price of T.V. set is sh. 9000. The hire purchase price is 40% more than the cash price. Kalawa bought the T.V. on hire purchase paying a deposit and 8 equal monthly instalment of sh. 1200 each. How much was the deposit?
A. Sh. 12600
B. Sh. 9600
C. Sh. 3000
D. Sh. 12000

31. A square whose sides measures 12cm have the same area as a triangle whose height is 8cm. What is the length of the base?
A. 16cm
B. 36cm
C. 24cm
D. 18cm

32. What is the value of

$$\frac{2.5\times5+0.94-4.8\times0.3}{9.6\div0.8}$$

A. 0.8
B. 1
C. 0.12
D. 0.355

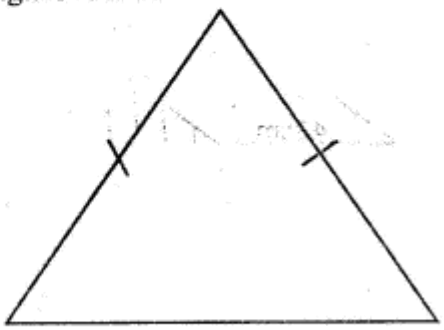
33. A salesman earn a basic salary of sh. 18500 per month. He is also paid 2.5% commission on the sales above 100000. If the sales man sold goods worth 600000 how much in total did he earn that month?
A. Sh. 12500
B. Sh. 31000
C. Sh. 15000
D. Sh. 33500

34. On a map whose scale is 1:20000 a piece of land is represented by a rectangle measuring 6cm long and 4cm wide. What are the actual measurement of length and width in metres?
A. 600m long by 400m wide
B. 60m long by 40m wide
C. 120m long by 80m wide
D. 1200m long by 800m wide

35. Muli is 8 years older than his wife. His wife is twice as old as their son. The sum of their ages in five years time will be 103. If the age of the son is x years, which of the following equation will be used to find the age of Muli?
A. 5x+8=103
B. 5x+23=103
C. 5x - 7 = 103
D. 3x+8=103

36. At the beginning of the year 2016 there were 1600 pupils at Wangui primary school. Out of these 55% were girls. At the end of the year the number of girls decreased by 10% and that of boys increased by 20%. How many pupils were there by the end of the year?
A. 1656
B. 792
C. 1512
D. 1440

37. The diagram below shows in iscosceles triangle whose perimeter is 64cm and the length of the base is 30cm.



What is its area of the triangle?
A. 510cm²
B. 255cm²
C. 120cm²
D. 240cm²

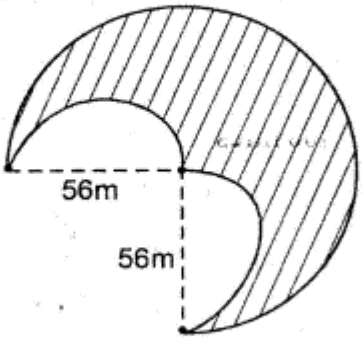
38. The table below shows the number of crates of bread sold by a shopkeeper in one week. The sales for Wednesday are not shown.

Day of the week	Mon	Tue	Wed	Thur	Fri	Sat	sun
No. of crates	8	10		11	16	8	18

If the mean sale for the week was 12 crates, what was the median sale?
A. 18
B. 8
C. 11
D. 13

39. Njenga had a certain amount of money. He gave $\frac{1}{3}$ of it to his son, ¼ to his daughter and $\frac{1}{10}$ of the remainder to his wife. If he was left with sh. 18000. How much did he give to his daughter?
A. Sh. 12000
B. Sh. 16000
C. Sh. 2000
D. Sh. 48000

40. The figure below represent Wabati's plot.



What is its perimeter?
A. 264m
B. 528m
C. 440m
D. 352m

41. Job took ¼ hour to cycle from home to school at a speed 36km/h. He took 24 minutes to travel back home. What was his speed in km/h from school back to his home?
A. 9km/h
B. 27km/h
C. $3\frac{3}{5}$km/h
D. 22½km/h

42. Wamalwa shared some money to his children as follows, Wekesa 0.27, Nafula 0.28, Wanjala 0.19 and Jirongo 0.16. If the total amount of the money was 108,000. How much did he remain with?
A. 0.1
B. 10,800
C. 16000
D. 12000

43. Due to prolonged drought the production of milk in Kisaju area decreased in the ratio 3:4 from the month of January to the month of February. If a total of 8000 litres were produced in January. How many litres of milk in total was produced in the two months?
A. 14000
B. 6000
C. 16000
D. 12000

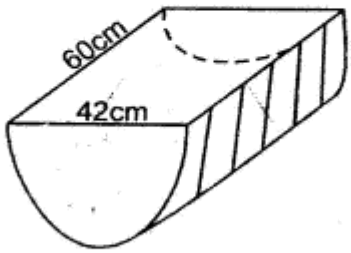
44. What is the capacity in litres of a circular tank of diameter 1.4m and a height of 2.1m?

A. 12936 litres
B. 3234 litres
C. 4620 litres
D. 15400 litres

45. A watch loses 30 seconds every hour. If it was set right on Monday 8:30am, what time will it show on Wednesday 8:30am?

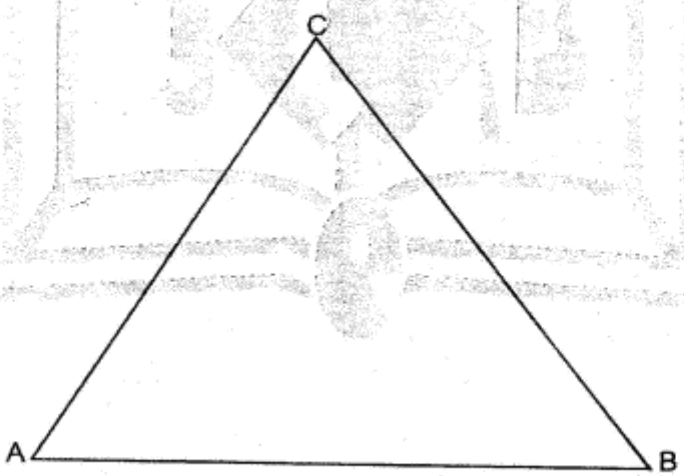
A. 8:45am
B. 9:54am
C. 8:06am
D. 9:06am

46. The figure below shows half a cylinder of diameter 42cm and a length of 60cm. What is its volume?



A. $41580cm^3$
B. $83160cm^3$
C. $332640cm^3$
D. $166320cm^3$

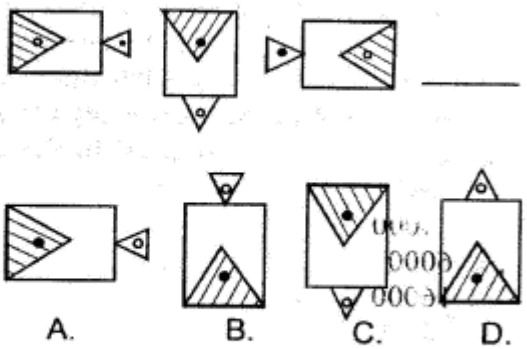
47. On the triangle below drop a perpedicular from point **C** to meet line **AB** at **X**. Bisect angle **BAC** and let the bisector meet the perpedicular at **Y**.



What is the size of angle XYA?

A. 50^0
B. 120^0
C. 60^0
D. 90^0

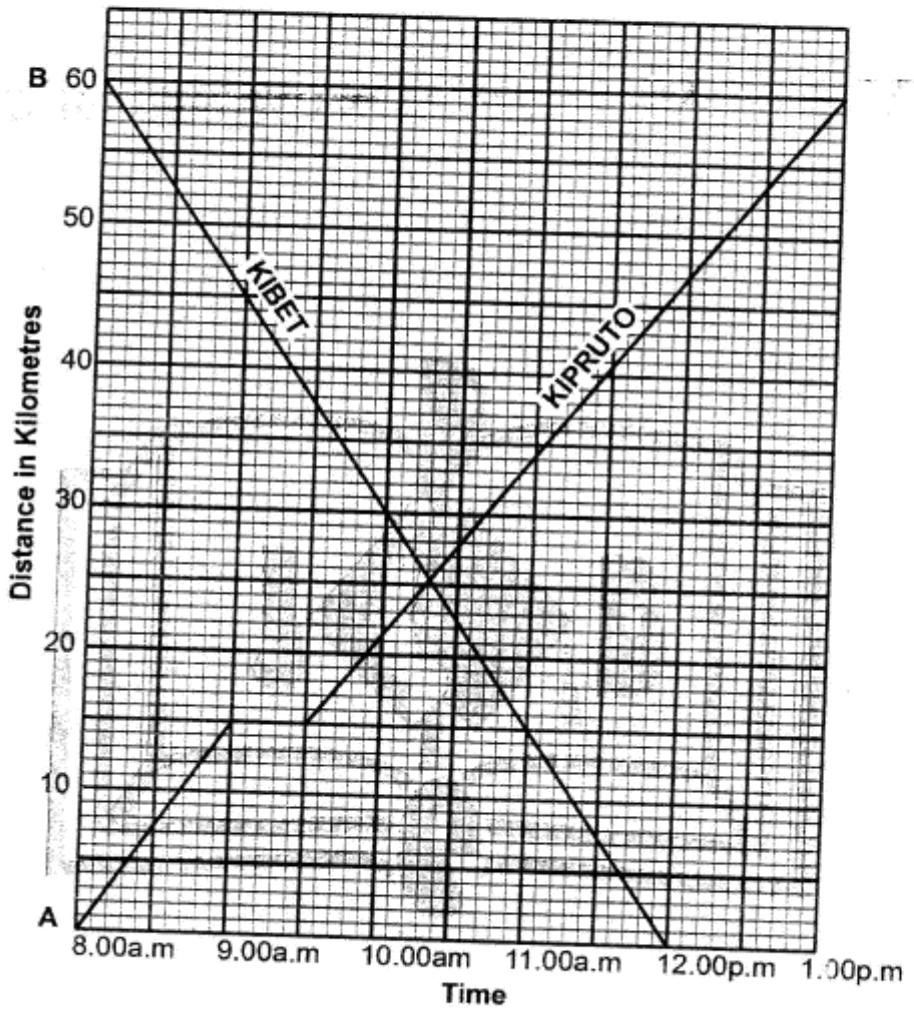
48. What is the next shape in the pattern?



49. Nzioka used his farm as follows
15% for vegetables, 25% for grazing, 40% for maize and 5% for homestead and the rest for coffee. If the information was put on a pie-chart, what angle would represent coffee?

A. 54^0
B. 90^0
C. 120^0
D. 72^0

50. The graph below shows the journey by two motorist **Kibet** and **Kipruto**. Kibet travelled from **town B** to town **A** while Kipruto travelled from town **A** to town **B**.



How far from town **A** was Kibet when he met Kipruto?

A. 35km/h
B. 25km/h
C. 30km/h
D. 36km/h