STANDARD SEVEN - 2018

MATHEMATICS

Time: 2hrs

1. What is **6060660.060** in words?
A. Six million sixty thousand six hundred and sixty and six hundredths.
B. Sixty million sixty thousand six hundred and sixty and sixty thousandths.
C. Six million sixty thousand six hundred and sixty and sixty thousandths.
D. Six hundred and six thousand six hundred and sixty and sixty thousandths.

2. What is the sum of the total value of digit **4** and **3** in the number **23645**?
A. 3000 B. 40
C. 2960 D. 3040

3. What is the smallest number that should be added to **9595** to make it divisible by **11**?
A. 3 B. 5
C. 6 D. 8

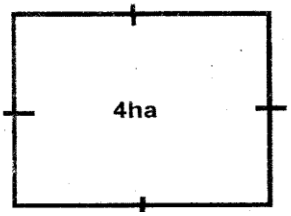
4. Round off **23439** to the nearest thousand.
A. 23400 B. 23000
C. 20000 D. 23440

5. Work out **40 + (12 - 3^2) ÷ 6 x 2**
A. 41 B. 24
C. $14^1/_3$ D. 28

6. Work out $4^1/_2$ **x** $3^1/_2$ ÷ $^1/_4$ =
A. 63 B. $^1/_{63}$
C. $3^{15}/_{16}$ D. $^9/_{28}$

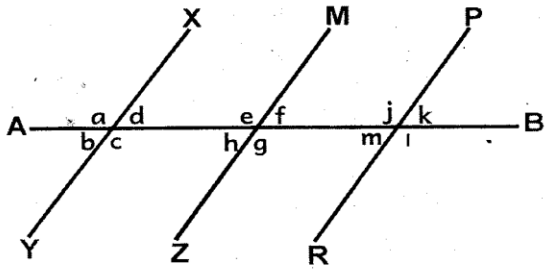
7. Increase shs. **80.80** by **80%**
A. shs. 101.00 B. shs. 145.44
C. shs. 64.64 D. shs. 160.80

8. The area of the square drawn below is **4ha**. What is the measure of one side of the square?



A. 2m
B. 20m
C. 200m
D. 2000m

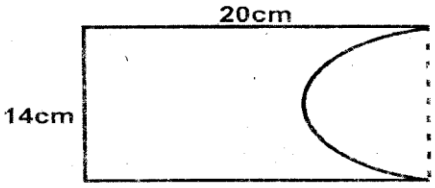
9. In the figure below line **XY** is parallel to line **MZ** and **PR. AB** is a transversal.



Which statement is **true** about the figure above?
A. Angle d = f = h = l
B. Angle c and g are alternating angles
C. c + h + j + d = 180^0 x 2
D. d, f and m are corresponding angles

10. During a tree planting day **240** pupils and **64** teachers participated. If each pupil planted **3** trees and each teacher planted **5** trees, how many trees were planted altogether?
A. 912 B. 1520
C. 1040 D. 312

11. What is the area of the figure below?



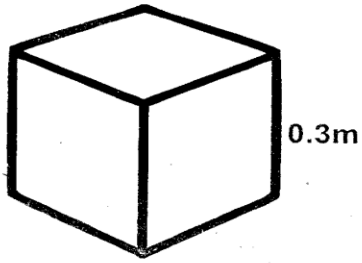
A. 77cm² B. 280cm²
C. 357cm² D. 203cm²

12. Work out $\frac{5\ (2.2 - 0.2)}{0.2} + 0.5$
A. 50.5 B. 52.5
C. 10 D. 10.5

13. What is the value of **y** in the equation $^2/_5y + 3 = 17$
A. 35 B. 50
C. 25 D. 8

14. A school bus can carry **36** pupils per trip. How many trips will it make if **290** pupils must be transported to an agricultural show?
A. 8 B. 2
C. 9 D. 7

15. What is the volume of the cube below in cm^3?

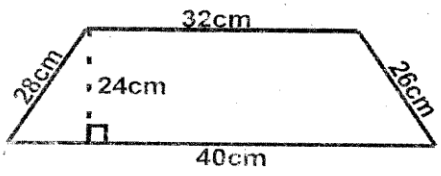


A. 0.027 B. 2.7
C. 2700 D. 27000

16. Kamau is **3** years older than Jane, Peter is **4** years younger than Jane. If Jane is **x** years, what is the sum of their ages now?
A. (3x + 1) years
B. (3x - 1) years
C. (3x + 7) years
D. (3x - 7) years

17. In a certain sub-county there are **84** schools. Each school had **450** pupils where each pupil was given **12** books. How many books were given altogether in the sub-county?
A. 45360 B. 6408
C. 546 D. 453600

18. What is the area of the trapezium below?



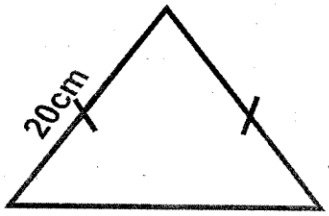
A. $864cm^2$ B. $1768cm^2$
C. $960cm^2$ D. $126cm^2$

19. Change **90km/hr** to m/s.
A. 20m/s B. 324m/s
C. 25m/s D. 45m/s

20. A square carpet had an area of **$16m^2$**. It was cut into four equal squares. What was the perimeter of each small carpet?
A. 8m B. 16m
C. 2m D. 4m

21. What is the sum of edges, vertices and faces of an open cuboid?
A. 26 B. 480
C. 25 D. 576

22. The perimeter of the triangle below is **72cm**. What is its area?



A. $384cm^2$ B. $400cm^2$
C. $200cm^2$ D. $192cm^2$

23. What is the value of $^1/_4$ of $\sqrt{256}$
A. 16 B. 4
C. 8 D. 64

24. What is the **L.C.M.** of **18, 27** and **54**?
A. 9 B. 99
C. 54 D. 108

25. What is **69.9975** to the nearest whole?
A. 69 B. 70
C. 70.99 D. 69.998

26. Njoroge bought the following items from a shop.
3 - 400g packets of tea leaves at shs. 60.00
2 - 2kg packets of flour @ shs. 140.00
$2^1/_2$kg of meat at shs. 250.00
4 bars of soap for shs. 480.00
How much did he pay for the items?
A. shs. 1565 B. shs. 3285
C. shs. 3005 D. shs. 1085

27. Work out $3^1/_2 \div 1^1/_4 \div {}^7/_{10}$
A. 4 B. $1^{24}/_{25}$
C. $^{25}/_{28}$ D. $^1/_4$

28. What is the square root of $\sqrt{5\frac{1}{16}}$
A. $2\frac{1}{4}$ B. $1\frac{1}{2}$
C. $25\frac{1}{256}$ D. $2\frac{1}{2}$

29. What is **3 ÷ 13** to three decimal places.
A. 0.230 B. 2.308
C. 0.231 D. 0.23

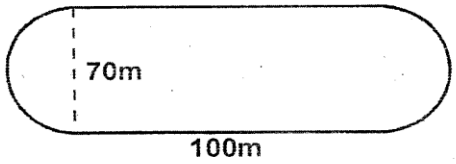
30. Work out $2\frac{1}{4} - 5\frac{2}{5} + 4$
A. $3\frac{13}{20}$ B. $2\frac{13}{20}$
C. $1\frac{17}{20}$ D. $\frac{17}{20}$

31. What is the value of **r** in the magic square below.

8		**9**
r	**7**	
		6

A. 7 B. 6
C. 8 D. 5

32. Kungu went round the field below $5\frac{1}{2}$ times. What distance did he cover in **km**?



A. 420 B. 2.695
C. 2.31 D. 0.42

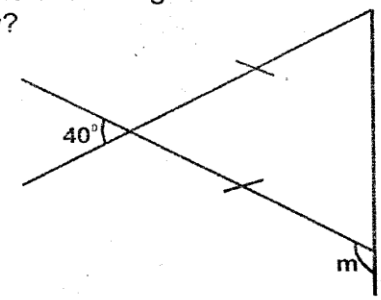
33. Which one of the following statements is **true** about quadrilaterals?
A. Square is a special rectangle.
B. Rhombus is a special square.
C. Parallelogram is a special rhombus.
D. Opposite angles of a trapezium are equal.

34. Which one of the fractions below forms a terminating decimal?
A. $\frac{7}{22}$ B. $\frac{1}{3}$
C. $\frac{3}{7}$ D. $\frac{3}{8}$

35. What distance is covered by a wheel of radius **21cm**, if it makes **500** revolutions in km?
A. 132 B. 66000
C. 0.66 D. 0.33

36. Bidii primary school has **450** pupils. If **60%** are girls, how many more girls than boys are there in that school?
A. 270 B. 180
C. 90 D. 45

37. Find the value of the angle marked **m** in the figure below?



A. 40° B. 140°
C. 70° D. 110°

38. Simplify the equation
$\frac{1}{3}$ **(9y + 6m) + 4 (y + 2m)**
A. 7y + 10m B. 5y + m
C. 10y + 8m D. 10y + 7m

39. What is the reciprocal of **0.5%**?
A. $\frac{1}{20}$ B. $\frac{1}{200}$
C. 200 D. 20

40. Wafula made a loss of **20%** after selling his bicycle for **shs. 4800**. How loss did he make?
A. shs. 1200 B. shs. 2400
C. shs. 960 D. shs. 6000

41. What is the next number in the pattern below?
11, 13, 16, 21, 28, _____
A. 37 B. 41 C. 40 D. 39

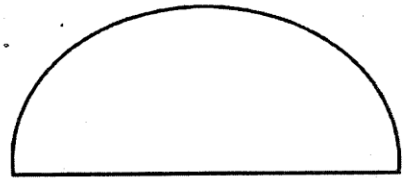
42. A father had **shs. 6000**. He gave **20%** to one of the sons and **20%** of the remainder to the daughter. He shared the remaining amount equally with the wife. How much did the wife get?
A. shs. 3840 B. shs. 1920
C. shs. 1200 D. shs. 960

43. What is the mean of the following numbers
0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
A. 55 B. 5.5 C. 5 D. 6

44. A meeting that took **8**hours **40**min ended at **7.35p.m.** At what time had the meeting started?

A. 10.55a.m. B. 10.55p.m.
C. 4.25a.m. D. 1.05a.m.

45. The circumference of the semicircle below is **44**cm. What is its radius?

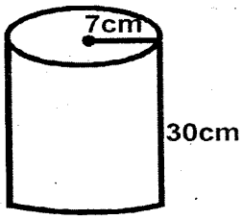


A. 28cm B. 21cm
C. 14cm D. 7cm

46. Construct triangle **XYZ**, where line **YZ = 8cm** angle **XYZ = YZX = 45°**. What is the length of line **XZ**.

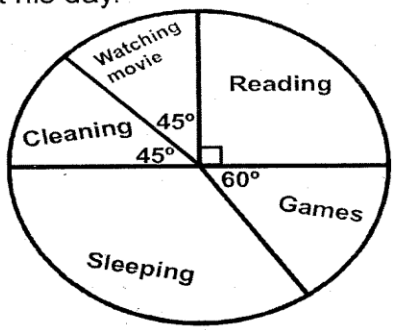
A. 6.1cm B. 6.8cm
C. 4.9cm D. 5.6 cm

47. What is the surface area of the solid below?



A. 1320cm² B. 1474cm²
C. 1628cm² D. 4620cm²

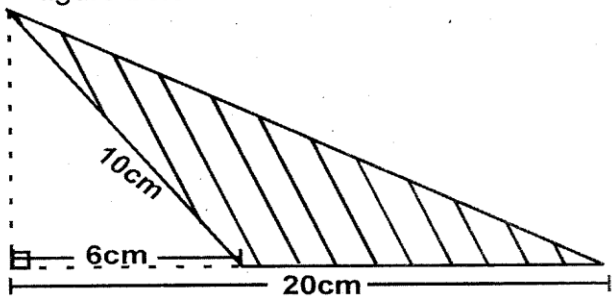
48. The pie-chart below shows how Kinyua spent his day.



How many hours did he spend sleeping?

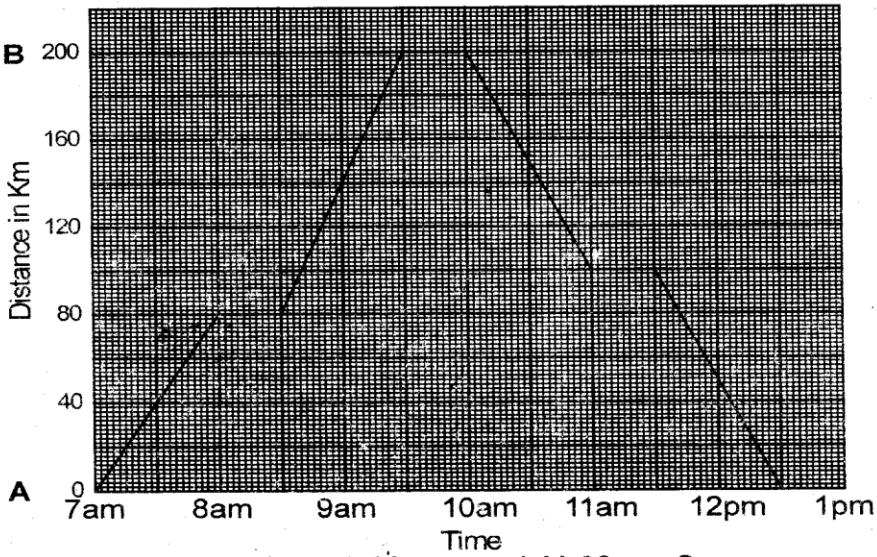
A. 8 hours B. 6 hours
C. 4 hours D. 3 hours

49. What is the area of the shaded part in the figure below?



A. 48cm² B. 24cm²
C. 56cm² D. 112cm²

50. The graph below shows the journey of a motorist from town **A** to town **B** and back.



What distance did he cover between **8.30a.m.** and **11.00a.m.**?

A. 80km B. 100km C. 200km D. 220km