K.C.P.E PREDICTION TWO - *MATHEMATICS 2 HRS*

1. Which one of the following is two million four hundred and sixty thousand eight hundred and ninety five and thirteen hundredths?
   A. 2406589.13
   B. 246895.13
   C. 2460895.13
   D. 2046985.013

2. What is the place value of digit 7 in the number 6784325?
   A. Hundred thousands
   B. Millions
   C. Ten thousands
   D. Seven hundred thousand

3. Find the difference between the total values of digit 8 and 5 in the number 13.8452.
   A. 0.805
   B. 0.795
   C. 0.75
   D. 0.3

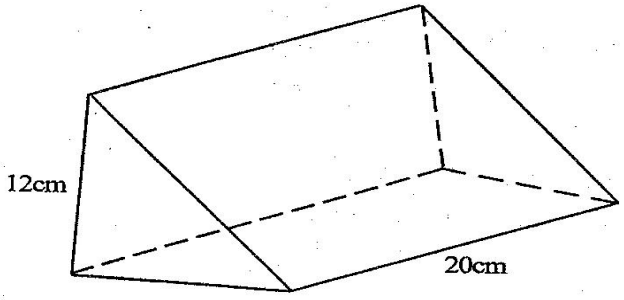
4. What is the value of;
   $$\frac{0.64 \times 0.005}{0.16} \ ?$$
   A. 0.02
   B. 0.002
   C. 20
   D. 0.2

5. Work out;-
   $\frac{3}{4} - (1\frac{3}{4} + 2\frac{17}{20}) \div 8\frac{5}{8}$
   A. $4\frac{12}{20}$
   B. $59\frac{4}{5}$
   C. $\frac{13}{60}$
   D. $\frac{2}{23}$

6. Find the next number in the sequence.
   413, 244, 123, 74, _____
   A. 25
   B. 40
   C. 49
   D. 63

7. What is the value of;-
   $$\frac{7.2 + 0.8 \times 5 - 1.2}{0.1}$$
   Give your answer correct to 1 decimal place.
   A. 37.6
   B. 64
   C. 100
   D. 38.8

8. A triangular prism below has a volume of 1920cm³. The prism has a length of 20cm and a height of it triangular face is 12cm. Calculate the base of the triangular face.



   A. 8cm
   B. 16cm
   C. 18cm
   D. 32cm

9. Calculate the difference of the LCM and HCF of 36, 48 and 96.
   A. 12
   B. 276
   C. 300
   D. 3456

10. Wario and Osman had sheep in their farms in the ratio 2 : 5 respectively. They had a total of 728 sheep. How many more sheep did Osman have than Wario?

A. 104

B. 208

C. 312

D. 520

11. What is the value of;-

$\frac{3(2xy^2 + 4x)}{2z}$?

If $x = y - 1$, $y = 4$ and $z = 4x - 4$

A. 27

B. 36½

C. 49

D. 20¼

12. Linda bought the following items

2, 2kg packets of unga @ Sh 105

3kg of sugar @ Sh 90

1¼kg of tomatoes @ Sh 60

2 loaves of bread for Sh 80

2 litres of milk @ Sh 50

She gave the shopkeeper four, two hundred shilling notes, how much balance did she get?

A. Sh 65

B. Sh 265

C. Sh 345

D. Sh 735

13. What is the value of

$1.6^2 \div \sqrt{10.24}$?

A. 8

B. 0.8

C. 3.6

D. 36

14. Find the value of **X** in the equation.

$\frac{5x - 10}{6} + 8x = 16$

A. 2

B. 4

C. 6

D. 12

15. The temperature of liquid dropped from 19°C by 28°C. What was the new temperature?

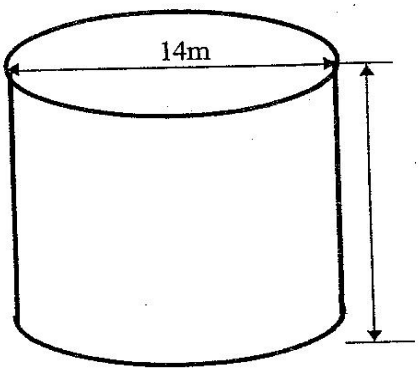
A. 9°C below 0°C

B. 9°C

C. 47°C

D. 47°C below 0°C

16. Calculate the total surface area of the closed cylindrical tank below.



A. 1474cm²

B. 1628cm²

C. 3872cm²

D. 4620cm²

17. Abdallah travelled at a speed of 80km/hr for 3 hours and then for 2 hrs at 60km/hr. Calculate his average speed for the whole journey?

A. 360km/hr

B. 140km/hr

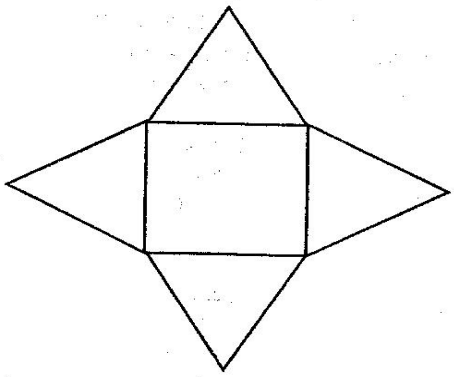
C. 120km/hr

D. 72km/hr

18. Eighteen men were supposed to do a certain job in 10 days. 3 men failed to turn up. How many more days did they spend to complete the job?

A. 2
B. 8
C. 10
D. 12

19. The net below can be used to make a.



A. Triangular based pyramid
B. Square prism
C. Triangular prism
D. Square based pyramid

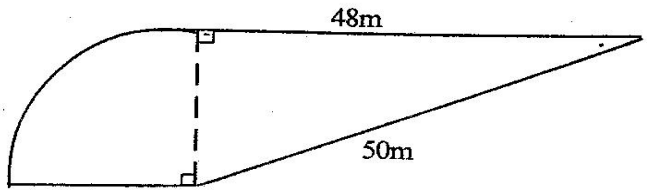
20. The cash price of a motorbike is 10% less than the hire purchase price. On hire purchase a deposit of Sh 31100 is required and fifteen equal monthly instalment of Sh 2400. What is the cash price of the motorbike?

A. Sh 67100
B. Sh 61000
C. Sh 60390
D. Sh 36000

21. A salesman earns a basic salary of Sh 11800. He is also paid 8½% commission on goods sold above Sh 50000. In one month, he sold goods worth Sh 220000. What was his total earnings for that month?

A. Sh 14450
B. Sh 18700
C. Sh 26250
D. Sh 30500

22. Find the perimeter of the figure below.
(Take $\pi = {}^{22}/_{7}$)



A. 120m
B. 134m
C. 200m
D. 490m

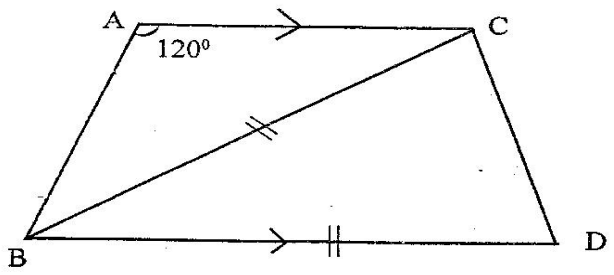
23. Omondi's cow produces 240 litres of milk everyday. He sells it in 2dl packets. How many packets does he sell?

A. 12000
B. 1200
C. 120
D. 12

24. A fruit seller bought 240 bananas at the rate of 6 for Sh 8. Later he sold them at the rate of 8 for Sh 12. Calculate his percentage profit?

A. 12.5%
B. 80.8%
C. $11\,{}^{1}/_{9}\%$
D. 16.7%

25. In the figure below line BC bisects angle ABD.



What is the size of angle ACD?

A. 150°

B. 105°

C. 75°

D. 30°

26. Upcoming Kibra CDF hall measures 80m long by 12m wide and 6m high. How many square tiles of 25cm will be required to cover the floor completely?

A. 15360

B. 1152

C. 7680

D. 1536

27. Construct a triangle **XYZ** in which line **YZ** = 6cm. Angle **XYZ** = 60° and angle **YZX** = 70°. Draw a circle passing through the points **XYZ**. Measure the radius.

A. 4.0cm

B. 5.2cm

C. 8.0cm

D. 2.6cm

28. Which is the smallest number that can be subtracted from 96853 to make it divisible by eleven?

A. 2

B. 5

C. 6

D. 9

29. The average weight of five pupils in Std 8 is 37.6k When the weight of their teacher is added the mea weight becomes 43kg. What is the weight of their teacher?

A. 258kg

B. 72kg

C. 70kg

D. 65kg

30. The following are properties of quadrilaterals.

i) Diagonals bisect each other

ii) Angles add up to 360°

iii) Have at least one pair of parallel sides

iv) Has four sides

Which one of the above properties does **NOT** apply to a trapezium?

A. iii

B. i

C. iv

D. ii

31. Which one of the following expressions is the simplified form of

$$\frac{4(t-q)+2(3t-2q)}{2(t+q)+2q}$$

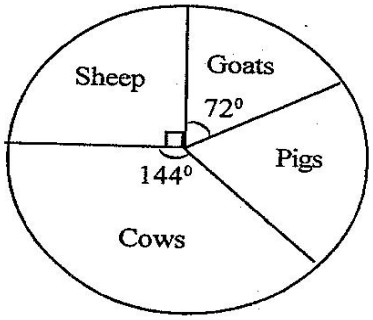
A. $\frac{10t-8q}{2t+4q}$

B. $\frac{10t}{2t+4q}$

C. $\frac{5t-4q}{t+4q}$

D. $5-2q$

32. The pie chart below shows the number of animals in Serut's farm.



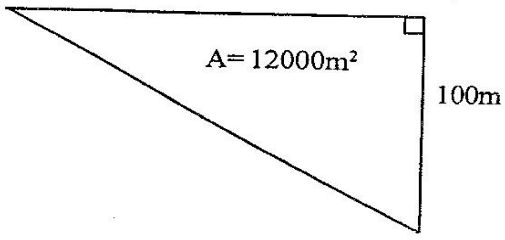
The number of pigs was 486. How many more cows than goats were in the farm?

A. 3240
B. 1296
C. 1620
D. 648

33. In year 2012 the population of Kibra Constituency was 60000. In the following year the population rose to 70000. What was the ratio increase?

A. 6 : 1
B. 6 : 7
C. 1 : 6
D. 7 : 6

34. The area of a right-angled triangular land below is 1200m². The land was fenced off with poles at an interval of 10m.



How many poles were needed?

A. 34
B. 35
C. 70
D. 71

35. Using line **WX** below construct rhombus **WXYZ** in which **WX** = 6cm and angle **ZWX** = 30°. What is the length of the shorter diagonal?

A. 11.6cm
B. 3.2cm
C. 5.8cm
D. 1.6cm

36. Asego stayed with her daughter from the morning of 19th September to the morning of 31st December. How many nights did she stay with her daughter?

A. 102
B. 103
C. 104
D. 105

37. Simplify the in equality below.

$$\frac{8p-12}{4} < \frac{10p+8}{6}$$

A. $p < 26$
B. $9 < 7\frac{1}{2}$
C. $p > 13$
D. $9 < 13$

38. Wang'ombe sold an item for Sh 1440 making a 20% loss. At what price must he sell it to make a profit of 20%?
A. Sh 9600
B. Sh 2160
C. Sh 1728
D. Sh 360

39. Shollei spends $^1/_3$ of his income on food, ¼ on school fees, $^1/_5$ of the remainder on rent and saves the rest. How much does he save if he uses Sh 1800 on rent?
A. Sh 1800
B. Sh 5400
C. Sh 7200
D. Sh 21600

40. **The table below shows Tunya's scores in five tests.**

Subject	Maths	Eng	Kisw	Sci	Sstre
Score out of 40	36	34	22	16	36

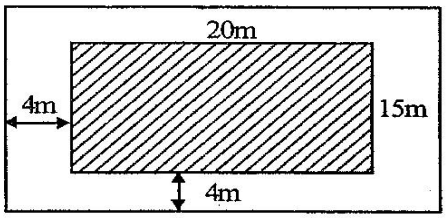
If a pie chart was drawn, what would be the size of the angle representing SSTRE?
A. 40°
B. 55°
C. 90°
D. 198°

41. On a map, the scale 1 : 5000 was used to represent a length of a piece of land whose drawing length was 2.5cm. What was actual length in kilometres?
A. 0.125
B. 12.5
C. ??????
D. 1250

42. A loaded lorry had a mass of 7.7 tonnes. It was loaded with 30, 90 kg bags of maize and 25, 50kg bags of beans. What was the mass of the lorry when empty?
A. 3.75t
B. 3.95t
C. 5.00t
D. 11.65t

43. Three Std 8 pupils Oduor, Akinyi and Cheboi contributed some money for Marter Heart run. Akinyi contributed Sh 807 less than Cheboi who contributed Sh 396 more than Oduor. If Oduor contributed **y**, what was their total contribution?
A. $3y + 15$
B. $3y - 311$
C. $3y + 707$
D. $3y - 15$

44. The diagram below represents a room which is covered by a carpet of length 20m and width 15m. The carpet leaves a 4m marginal all round. Calculate the are which is not covered by the carpet in Arcs.



A. 344
B. 300
C. 3.44
D. 0.0344

45. Buses of three companies **X, Y** and **Z** leave a station after every 20 minutes, 35 minutes and 40 minutes respectively. If the buses left the station at 7.05am, when did they leave it together next?
A. 11.45am
B. 2.25am
C. 12.05pm
D. 11.25am

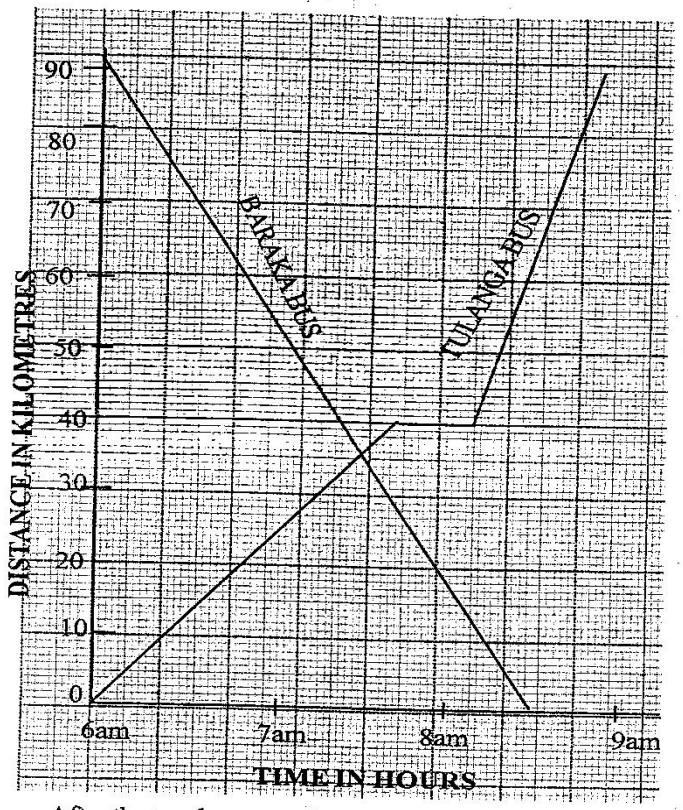
46. A matatu travelling at 80km/h started its journey at 10.55am and covered a distance of 320km. What time in the 24hr clock system did the journey end?
A. 2.55am
B. 2.55pm
C. 0025h
D. 1455h

47. Ken borrowed Sh 180000 from a bank that charged compound interest at a rate of 15% per annum. How much did he pay back at the end of 2 years?
A. Sh 234000
B. Sh 238050
C. Sh 58050
D. Sh 54000

48. Kioko ran to a river a distance of 674m. What distance in Dekametres did he cover?
A. 6740Dm
B. 674Dm
C. 67.4Dm
D. 6.74Dm

49. Ali bought a pair of trousers at Toi market and was given a 25% discount. If the discount was Sh 125, what was the marked price?
A. Sh 150
B. Sh 375
C. Sh 500
D. Sh 625

50. The graph below shows two buses coming from opposite directions. One of the buses broke before completing the journey and stopped.



After the two buses met how long did TULAGA bus take before breaking?
A. 45mins
B. 15mins
C. 30mins
D. 1 hr 20mins