

# KCPE PREDICTION 2020 MATHEMATICS

1. Which of the following numbers is one million two hundred and two thousand two hundred and two

- A. 1 200 202      B. 1 202 200  
C. 1 202 202      D. 1 202 002

2. What is the value of  $62 - 42 + 22$ ?

- 5  
A. 8                      B. 4  
C. 28                    D. 9

3. What is 289.879 to the nearest tenth?

- A. 289.88              B. 289.9  
C. 289.00              D. 290.0

4. What is the square root of 6

- A.  $\sqrt{6}$       B.  $\sqrt{3}$       C.  $3\sqrt{2}$       D.  $2\sqrt{3}$

5. What is the total value of digit 7 in the number 2876542?

- A. Ten thousands  
B. 7 000  
C. Seventy thousand  
D. Seven hundred thousand

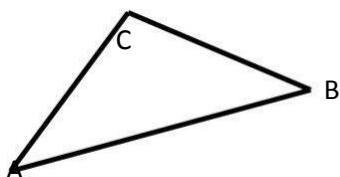
6. The table below shows the number of milk delivered to Nyali plant first six month of the year 2016.

Month	Jan	Feb	Mar	Apr	May	June
Amt. of milk	4350	2135	2425	4750	4230	3980

In which two consecutive months was the amount delivered highest ?

- A. May and June  
B. January and February  
C. April and May  
D. January and May

7. The triangle ABC below is drawn accurately



What is the size of angle BCA?

- A. 92                      B. 46

- C. 42                      D. 108

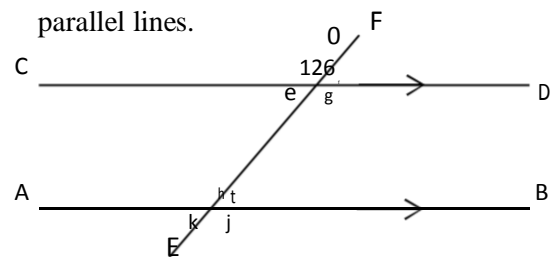
8. What is the highest common factor of 120, 150 and 180?

- A. 1 800                      B. 30  
C. 3 600                    D. 60

9. A rectangular water tank measures 1.2m by 80cm by 0.5m. what is its capacity in litres?

- A. 0.48l                      B. 4.8l  
C. 480l                      D. 4 800l

10. In the figure below line AB is parallel to line CD. Line EF is transversal across the two parallel lines.



Which of the following statement is not correct?

- A. Angle g = Angle j = 126  
B. Angle e + Angle h = 180  
C. Angle j + Angle h - Angle f = 198  
D. Angle h + Angle f + Angle i = 180

11. What is the next number in the pattern 3,5,8,13 \_\_\_\_\_?

- A. 24                      B. 19  
C. 20                      D. 23

12. Jasmin had 25 -500 Shillings notes and 13-200 shillings notes. He decided to change all the money into 50 shillings notes. How many notes did she get?

- A. 5100                      B. 250  
C. 52                      D. 302

13. A sales girl earns a basic salary of shs. 10 000 plus 5% commission on all the sales she makes. In a month she sold goods worth Sh.200 000. How much commission did she get that month?

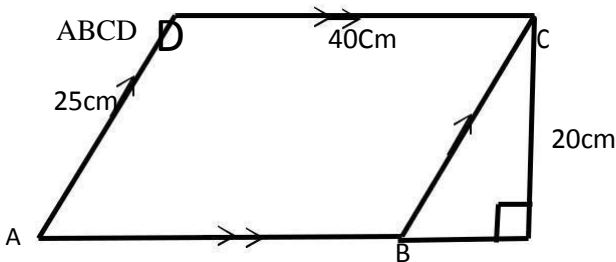
- A. Shs. 10 000      B. Shs. 20 000  
C. Shs. 30 000      D. Shs 15 000

14. A section of a road 350m long was planted with flowers at an interval of 5m. How many flowers were planted ?

- A. 70                      B. 71  
C. 69                      D. 142

15. Oyalo bought three thermos flask at a total of shs. 1080. He later sold each of them at shs. 400. What was his percentage profit?  
 A. 4%                                      B. 11%  
 C. 37%                                      D. 20%

16. The figure below shows a parallelogram



What is the area of the parallelogram above?

- A. 100cm<sup>2</sup>                                      B. 500cm<sup>2</sup>  
 C. 800cm<sup>2</sup>                                      D. 750cm<sup>2</sup>

Wednesday together?

- A. 210                                      B. 98  
 C. 70                                      D. 112

18. The mean age of 6 boys is 12 years if the ages of five of them is 13,14,9,15 and 10, how old is the sixth boy?  
 A. 11 years                                      B. 13 years  
 C. 12 years                                      D. 61 years

19. Construct a triangle JKL such that line JK =6.5cm KL=7cm and LJ=8cm. Draw a circle touching points JKL. What is the length of the diameter?  
 A. 4.2cm                                      B. 4cm  
 C. 2cm                                      D. 8.4cm

20. The table below shows arrival and departure times for buses of a certain route from town A to town E

TOWN	ARRIVAL	DEPARTURE
A.		8.30AM
B.	9.30 AM	9.35AM
C.	11.40AM	12.10 NOON
D.	2.45PM	3.00PM
E.	4.45PM	5.00PM

How long does it take the bus to travel from town C to town E

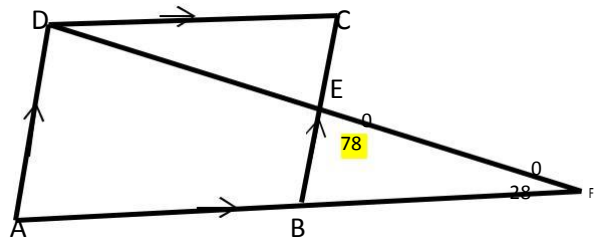
- A. 4hrs 35min                                      B. 4hrs 50min  
 C. 4hrs 45min                                      D. 5hrs 05min

21. Ken and Kelvin shared some money in the ratio 3:4 Kelvin got shs. 3600 more than Ken. How much money in total were they sharing  
 A. Shs. 10 800                                      B. Shs. 3 600

C. Shs. 14 400                                      D. Shs. 25 200

22. Joyce borrowed shs. 120,000 from a bank that charged a simple interest at the rate 12% per annum. How much money did she pay back after 2 years?  
 A. Shs. 28 800                                      B. Shs. 14 400  
 C. Shs. 148 800                                      D. Shs. 134 400

23. In the figure below ABCD is a rhombus Line ABF and DEF are straight lines  
 Angle BFE = 28° and angle BEF = 78°



What is the size of angle ADE?

- A. 78°                                      B. 106°  
 C. 74°                                      D. 152°

24. What is the value of

$$\frac{2x-y}{n} + z$$

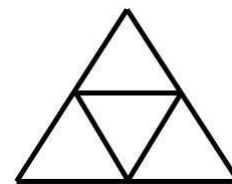
$$z = 5 \quad y = 4 \quad x = 3$$

- A. 7                                      B. 6                                      C. 8                                      D. 12

25. A closed cylindrical tin has a radius of 14 cm and a height of 20cm. what is the area of the curved surface?

- A. 1760cm<sup>2</sup>                                      B. 12320cm<sup>2</sup>  
 C. 1232cm<sup>2</sup>                                      D. 2376cm<sup>2</sup>

26. How many edges faces and vertices do the net drawn below have when folded into a solid ?

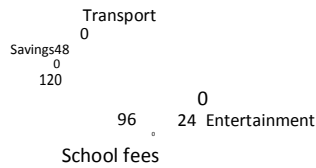


- |    |   |   |   |
|----|---|---|---|
|    | E | F | V |
| A. | 4 | 6 | 4 |
| B. | 4 | 4 | 6 |
| C. | 6 | 4 | 4 |
| D. | 5 | 8 | 5 |

27. Regina earns a total of shs. 16 250 after working for 25days. How much more would she earn if she works for 32 days?

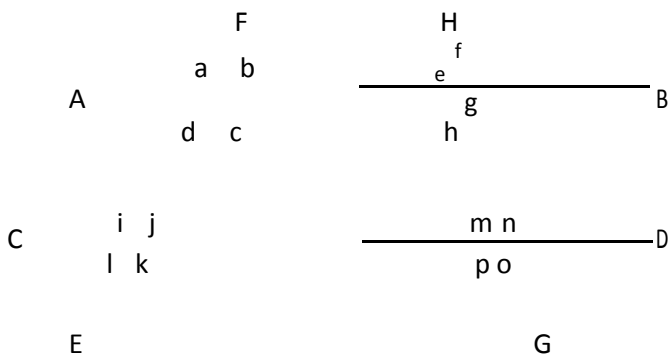
- A. Shs. 20 800                                      B. Shs. 4 550  
 C. Shs. 650                                      D. Shs. 14 300

28. The pie chart below show how Omunga spends his monthly salary of shs. 36 000.



How much more does he spend on school fees than on entertainment?

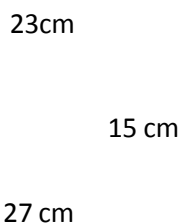
- A. Shs. 2400                      B. Shs. 12 000  
 C. Shs. 9600                      D. Shs. 7200
29. Njau left home for the market at 9.30am and took 2hrs 40min. He stayed at the market for 1h 20min. the time taken to travel to the market is twice the time taken to travel back home?
- A. 2.50 pm                      B. 12.10pm  
 C. 1.30pm                      D. 2.30pm
30. In the figure below line AB is parallel to line CD. Line EF and GH are transversal



- Which of the following statement is correct?
- A. Angle J and h are co- interior angles  
 B. Angle n and h are vertically opposite angles.  
 C. Angle k and e are corresponding angles.  
 D. Angle m and o are co-interior angles

31. Which of the following is the simplest form of the expression.
- $$\frac{(6x+12y) - (3x-6y)}{3}$$
- A.  $5x + 10y$                       B.  $3x + 6y$   
 C.  $5x + 6y$                       D.  $3x + 10y$

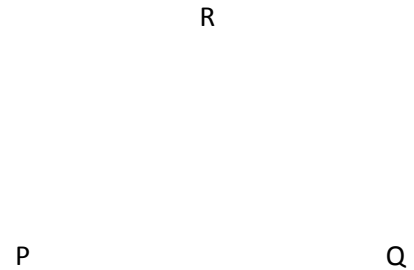
32. The figure below shows a trapezium



What is its area?

- A.  $750\text{cm}^2$                       B.  $375\text{cm}^2$   
 C.  $405\text{cm}^2$                       D.  $345\text{cm}^2$

33. On the triangle PQR drawn below drop a perpendicular from point R to meet line PQ at X



What is the length of line PX

- A. 4.7 cm   B. 5.5cm   C. 4cm   D. 7cm
34. The number of elephants at Tsavo national park increased by 4500 to 18000. What was the percentage increase?
- A. 25%   B. 20%   C. 40%   D. - %

35. Calculate the volume of the cylindrical container below in m<sup>3</sup>



80cm

- A.  $0.788848\text{m}^3$                       B.  $7.8848\text{m}^3$   
 C.  $78.888848\text{m}^3$                       D.  $788.48\text{m}^3$
36. A rectangular plot of land is 840mlong by 560m wide. The land is to be fenced using four strands of wire. What is the length of the wire required in metres?
- A. 1400m                      B. 2800m  
 C. 11200m                      D. 5600m

37. Four boys contributed money as follows John 0.16, Tony 0.26, James 0.36 and Reagan the rest. If the total amount contributed was shs. 2400. How much was contributed by Reagan?
- A. Shs. 864                      B. Shs. 624  
 C. Shs. 384                      D. Shs. 528

38. Kyalo bought the following items from a shop. 2-2kg packets of wheat flour at 120 per packet  
 3kg sugar @ shs. 112

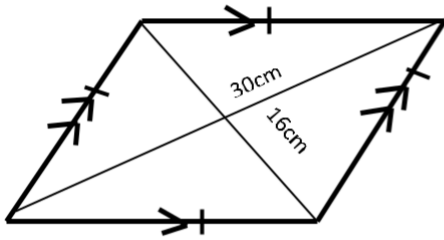
1/2kg salt for shs. 45

3litres cooking oil@ shs. 165  
 3 rolls of tissue for shs. 90

How much balance did he get if he paid using 3 – 500 shillings note?

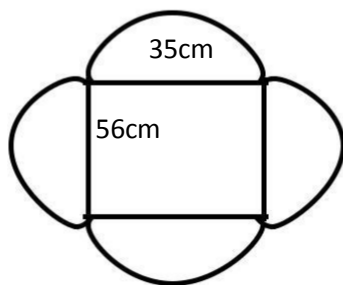
- A. Shs. 1206                      B. Shs. 294  
 C. Shs. 234                      D. Shs. 1266

39. The figure below shows a rhombus whose diagonals are 16cm and 30cm



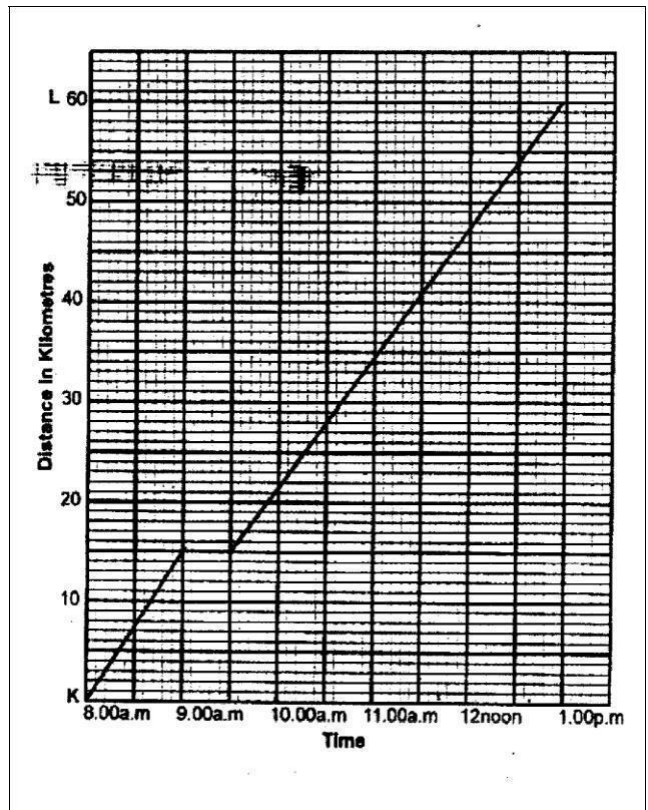
What is the perimeter of the rhombus?

- A. 240 cm                      B. 136cm  
C. 96cm                         D. 68cm
40. In a park there are Lions, Cheettah and Leopard. The number of cheettah are twice as many as lions. The number of leopards are a quarter of lions. If the number of lion is  $y$  what is the total number of leopards lions and cheettah in the park?  
A.  $2 \frac{1}{4} y$  B.  $10y$  C.  $4 \frac{1}{4} y$  D.  $3 \frac{1}{4} y$
41. -What is the value of X in the equation  
A. 5    B.10    C. 18    D. 9
42. The area of a right angled triangle is  $\frac{1}{2} \times 30\text{cm}$  the length of the shortest side is 5cm . what is the perimeter of the triangle?  
A. 30cm                      B. 24cm  
C. 13cm                      D. 12cm
43. How much money did Kiprotich spend on food and rent if his salary is sh. 10800?  
A. Shs. 8400                      B. Shs. 3600  
B. Shs. 2400                      C. Shs. 1500
44. The marked price of a T.V is sh. 24000. Kamau paid shs. 21120. What percentage discount was he given?  
A. 22%                      B. 18%  
C. 20%                      D. 12%
45. Jackline had 100kg of rice which he packed as follows  
*Half into 250g packets*  
*One quarter into 500g packets* The remainder into 1kg packets. how many packets in total did he get  
A. 200                      B. 275  
C. 250                      D. 300
46. The figure below shows a table mat



What is the perimeter of the table mat?

- A. 286cm                      B. 468cm  
C. 143cm                      D. 280cm
47. A bus left Mombasa for Nairobi at 9.45pm on Thursday. The journey took 9hr 45min. At what day and time did the bus get Nairobi?  
A. Friday 8.30am  
B. Friday 7.30 am  
C. Thursday 7.30am  
D. Thursday 8.30pm
48. The marked price of a generator is shs. 30 000. The hire purchase price is 120% of the marked price . jasmin paid a deposit of shs. 9000 and the rest in 12 equal monthly instalments. How much was each instalment?  
A. Shs. 1750                      B. Shs. 1500  
C. Shs. 2500                      D. Shs. 2250
49. The mean mass of five boys is 46kg four of the boys weighs 47,48,42 and 43. What is the mass of the fifth boy?  
A. 45 B. 40    C. 50                      D. 35
50. The graph below show the journey by Ouma from town K to town L



What was the average speed in km/hr.

- A. 20km/hr C. 15km/hr B. 30km/hr D. 12km/hr

