BEMBEKE ZONE EXAMINATIONS BOARD

2021 PRIMARY SCHOOL LEAVING CERTIFICATE MOCK EXAMINATION

MATHEMATICS

(100 MARKS)

Date _____ **Subject number : P131**

Time allowed : 2hours

Name of candidate:_____

(Surname first)

Name of School_____

Instructions:

1. **This paper consists of 8 printed pages. Please check**
2. Answer all questions. In Section A, encircle the letter corresponding to the right answer to each question. In Section B, write your answers in the spaces provided under each question.
3. There are **20** multiple choices questions in Section **A** and **10** Questions in section **B**
4. You are provided with blank pages at the end of the paper for rough work for section A. Do not tear them off.
5. In Section **B**, you need to show **all** your working.
6. The use of electronic calculators is **not** allowed.
7. In the table provided on this page, tick against the question number you have answered.
8. Please make sure you have written your name and school name on the question paper in the spaces provided.
9. Hand in your examination papers to the invigilator when time is called to stop writing

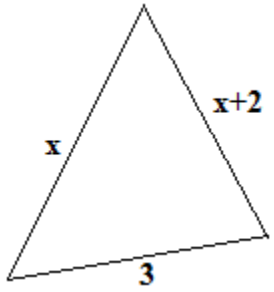
Question Number	Tick Qs 31 – 58 if answered	Do not write in these columns	
1-20			
21			
22			
23			
24			
25			
26			
27			

Section A (40 marks)

Answer all questions in this section.

Encircle the letter corresponding to the right answer for each question

1. Express 376.697 to the nearest whole number.
   A. 377.7
   B. 377
   C. 376.700
   D. 377.707
2. Express 6 hours as a fraction of a day
   A. $\frac{1}{4}$
   B. $\frac{2}{3}$
   C. $\frac{1}{2}$
   D. $\frac{1}{3}$
3. The drawing of an object is 6cm long. What is the actual length of the object if the scale used is 1:10?
   A. 0.06cm
   B. 0.6cm
   C. 6.0cm
   D. 60cm
4. A nurse worked at the hospital for two decades. How many years did she work at the hospital?
   A. 14 years
   B. 20years
   C. 25years
   D. 50years
5. What type of a triangle is shown in the figure 1 below?



   A. Scalene
   B. Equilateral
   C. Isosceles
   D. Triangle
6. Find the prime factors of 42.
   A. 2^2 x 7
   B. 2 x 3 x 7
   C. 2 x 2 x 7
   D. 2 x 21

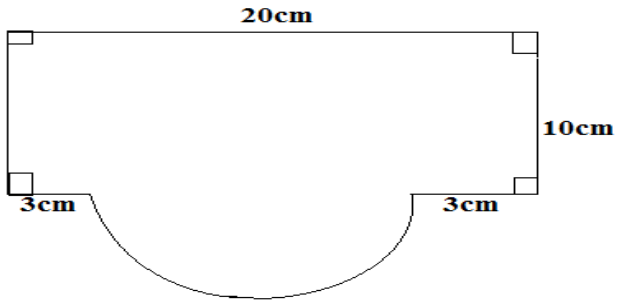
   Table 1 shows number of pencils distributed to learners in standards 1, 2, 3 and 4 at a certain school. Use it to answer questions 7 and 8.

CLASS	TALLIES
STANDARD 1	𝍸 𝍸 𝍸
STANDARD 2	𝍸 𝍸 𝍸 /
STANDARD 3	𝍸 𝍸 𝍸 //
STANDARD 4	𝍸 𝍸 𝍸 ///

7. Which class received the least number of pencils?
   A. Standard 1
   B. Standard 2
   C. Standard 3
   D. Standard 4

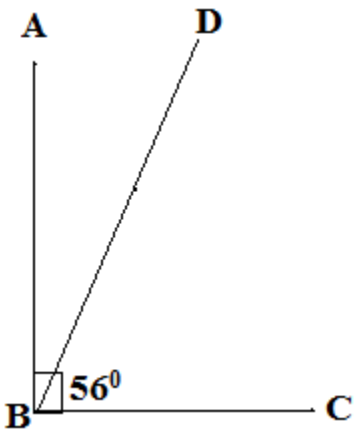
8. Find the total number of pencils distributed to all classes.
   A. 15
   B. 21
   C. 44
   D. 66
9. Simplify $\frac{5}{12} x \frac{3}{8} \div \frac{1}{6}$
   A. $\frac{5}{192}$
   B. $38\frac{2}{5}$
   C. $\frac{15}{16}$
   D. $1\frac{1}{16}$
10. A bus takes 3hours on a journey of 147km. find its speed.
    A. 60km/hr
    B. 49km/hr
    C. 20km/hr
    D. 65km/hr

Figure 2 below is a composite figure consists of a rectangle and a semicircle. Use it to answer question number 11.



11. Calculate the perimeter of the figure.
    A. 34 cm
    B. 68 cm
    C. 90cm
    D. 46cm
12. Find the largest number that can be divided into 12 and 66 without leaving a remainder.
    A. 2
    B. 3
    C. 6
    D. 12
13. Express $\frac{2}{3}$ of a straight angle in degrees.
    A. 60^0
    B. 90^0
    C. 120^0
    D. 180^0
14. The average of three numbers is 402. If the sum of first two numbers is 856. Find the third number.
    A. 227
    B. 350
    C. 428
    D. 454

Figure 3 below shows angles of different values. Use it to answer question number 15.



15. What is the value of angle ABD?

A. 56^0

B. 45^0

C. 34^0

D. 90^0

16. The circumference of a base of a basin is 176cm. calculate the radius (Take $\pi = \frac{22}{7}$)

A. 28cm

B. 56cm

C. 42cm

D. 14cm

17. Increase 1650 in the ratio 5 : 3.

A. 900

B. 8250

C. 550

D. 2750

18. Simplify 15e + 7f – 5 – 6f + 6e + 6.

A. 21e + f + 1

B. 9e + f + 1

C. 21e + f – 1

D. 9e – f – 1

19. Emmanuel gets a commission of K35 on every 4 pairs of trousers he sells. If he sells 112pairs of trousers. Find his commission.

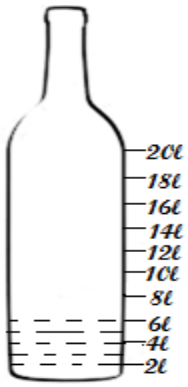
A. K980

B. K3920

C. K1280

D. K448

The figure below shows a bottle of cooking oil. Use it to answer question number 20.



20. How many more litres of cooking oil are needed to fill the bottle to the maximum marked level?

A. 6 litres

B. 10 litres

C. 14 litres

D. 20 litres

Section B (60 marks)

Answer all questions in this section. Write your answers in the space provided under each question. Show your working.

21. **Table 1** shows a message sent by telegram

From	: Mphatso Box 20 Thyolo, school closes next week send transport.
To	: Mrs Mbewe Box 13 Dedza.

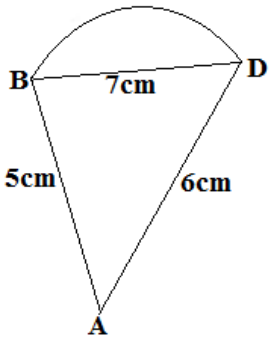
a. How much was the cost of sending at K12.00 per word? **(3 marks)**

b. When the number M is reduced by 13, the result is 15. Calculate the number represented by M.

(3 marks)

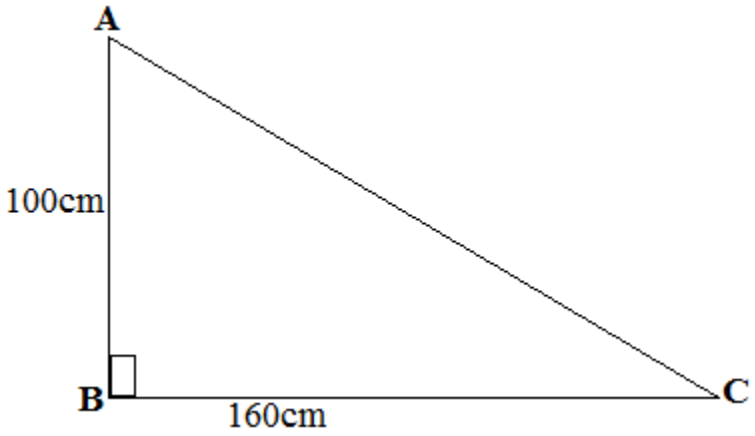
22. a. A farmer has 126 bags of maize, beans and rice. For every bag of maize he has 2 bags of beans and 3 bags of rice, how many bags of each has? **(6 marks)**

b. Find the perimeter of the figure



(6 marks)

23. Figure below shows a triangle ABC in which angle ABC = 90^0, AB = 100cm and BC = 160cm



a. Draw the figure accurately using a scale of 1cm representing 20cm. **(4 marks)**

b. Measure and state the length of the line AC on your drawing **(2 marks)**

24. a. Add the difference between $9\frac{5}{16}$ and $5\frac{7}{8}$ to the product of $\frac{9}{16}$ and $\frac{8}{27}$ **(5 marks)**

b.Mr Banda made a loss by selling 8 baskets of tomatoes for K18 200, if the cost of each basket was K250.00. Calculate the loss percent. **(5 marks)**

25. a. Find the median of the following body temperatures for patients at a certain hospital: 36.5^0C, 37^0C, 35.9^0C, 36.2^0C, 37.2^0C, and 37.7^0C. **(4 marks)**

b. Find the value of x in the equation $3x + 2 = 18 – x$ **(3 marks)**

26. a. The table below shows income tax rate.

Income per month	**Tax rate**
First K12, 000. 00	0% (Tax free)
Next K3, 000	15%
Excess (over) K15, 000	30%

How much tax does a person who receives a salary of K40, 000 pay per month? **(8 marks)**

b.Model 16.64 on abacus **(3 marks)**

27. Prepare a bank account using the following transactions.

    1 Sept 2007 opened a bank account with K8 000

    3 Sept 2007 bought second hand dress at K3 000 and paid by cheque.

    4 Sept 2007 withdrew K2 000 for office use

    17 Sept 2007 paid salaries K2 500 by cheque **(8 marks)**

END OF QUESTION PAPER

NB: This paper contains 8 printed pages