

Name \_\_\_\_\_

Index No. \_\_\_\_\_

8011/2

ARITHMETIC

December 2015

Time: 1 hour

Candidate's Signature \_\_\_\_\_

Date \_\_\_\_\_



THE KENYA NATIONAL EXAMINATIONS COUNCIL

EARLY CHILDHOOD DEVELOPMENT AND EDUCATION

CERTIFICATE IN PROFICIENCY EXAMINATION

ARITHMETIC

1 hour



**INSTRUCTIONS TO CANDIDATES**

*Write your name and index number in the spaces provided above.*

*Sign and write the date of examination in the spaces provided above.*

*Answer ALL the questions in this paper.*

*All answers must be written in the spaces provided in this booklet.*

*Do NOT remove any pages from this booklet.*

*Candidates should answer the questions in English.*

**For Examiner's Use Only**

Maximum Score	Candidate's Score
40	

[Ecolebooks.com](http://Ecolebooks.com)

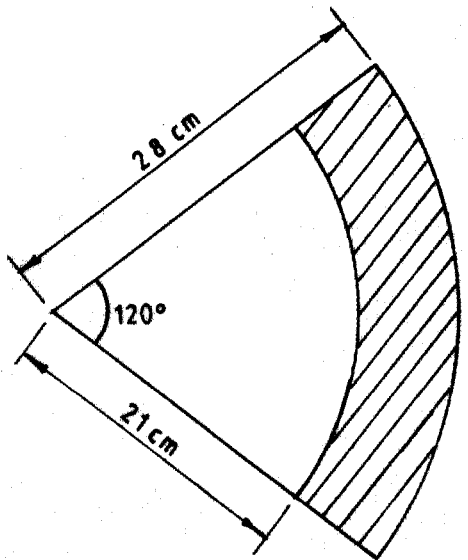
**This paper consists of 8 printed pages.**

**Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

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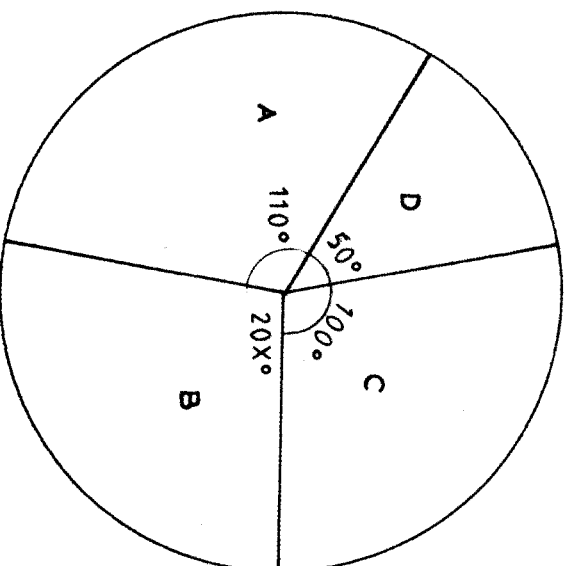
1. Find the L.C.M of the following numbers 36, 24, 40, 16.
2. Evaluate  $\frac{1}{2}$  of  $\frac{1}{4} \div \frac{1}{8} + \frac{3}{4} - \frac{1}{8}$
3. A piece of cloth 360 cm long is cut in the ratio 9:6. Calculate the length of each piece

4. Calculate the area of the shaded part in the figure below (not drawn to scale).



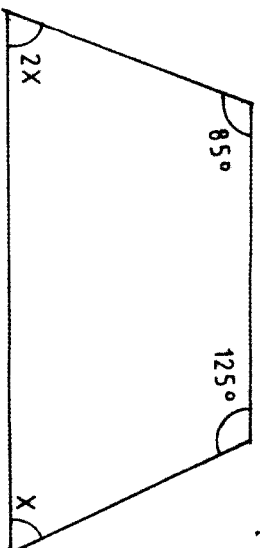
5. Mary who runs a clothing shop bought a skirt for Ksh 500 and marked it at Ksh 600. A customer bought it at Ksh 550 after bargaining. What percentage profit did Mary get?

6. The pie chart below represent the number of foot ball teams in four counties A, B, C and D in Kenya.



- (a) Find the value of  $x$ .
- (b) If the total number of teams in the four counties is 36. Find the number in county B.

7. Find the value of  $x$  in the following figure.



8. Calculate the total surface area of a closed cylinder of base radius 7 cm and a height of 21 cm.

9. The marks of ten students in a test were: 55, 62, 51, 49, 65, 59, 67, 60,  $x$  and 61. If the mark was 59, find the value of  $x$ .

10. A day in a school starts at 7.30 am and ends at 5.00 p.m. Tea and lunch breaks take a two hours.

(a) How long do the lessons take?

(b) If there are ten equal lessons in a day how long is each lesson?

11. Write the following as a single fraction in its simplest form.

$$\frac{4x - 6}{4} + \frac{2x - 2}{3}$$

12. Solve the pair of simultaneous equations:

$$2x - y = 3$$

$$7x + 2y = 16$$

13. Write the place value of the digit 8 in the number.

2 4 6 6 8 4 2 0 0 5

14. A map is drawn to scale of 1:2000. A rectangular field on the map measures 2 cm by 3 cm. Find the actual dimensions on the ground in metres.

15. Two rings of diameter 6.3 cm and 4.9 cm are cut and joined to form a new ring.
- (a) Find the circumference of the new ring.
- (b) Work out the radius of the new ring.