AITEL EXAMINATIONS BUREAU LIMITED

UGANDA CERTIFICATE OF LOWER CURRICULUM EDUCATION

END OF YEAR 2023

S.1 MATHEMATICS

TIME: 2HOURS 15 MINUTES

SECTION A
(Attempt all the Items in this Section)

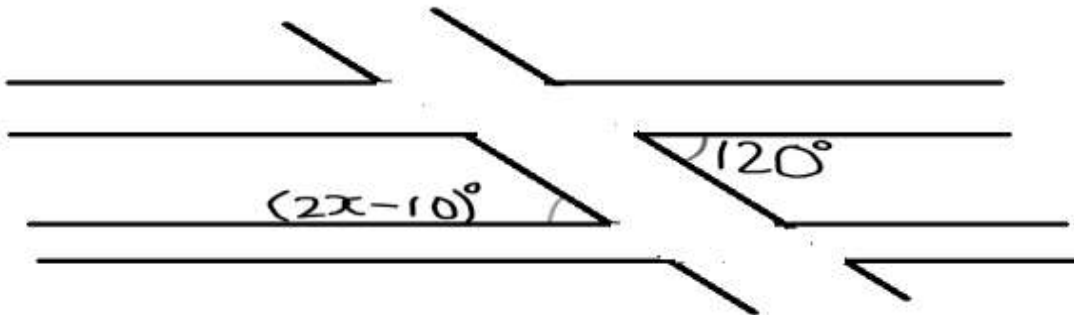1. Alexa looks at her watch and sees that the time is

   a. Write this time in words.

   b. What will be the time 10 minutes later?

2. A senior two student is standing facing South East, What direction will he/she be facing after turning

   a. Anti-clockwise 45^0

   b. Clockwise through 140^0

3. The figure below is a plan made by a district engineer in a bid to have a well-constructed road. With reasons for each of your calculations, help the engineer to find the value of the unknown x in plan.

4. A survey was carried in a secondary school to find out what transport means the students used to travel to school. The data obtained from the survey on **35** students was represented on a pie chart as shown below.

of transport used by the students?

b. How many of the students travel to the school by Bike.

a. What is the most common means

5. A company selling newspapers spends UGX 1,500 to produce a copy of the newspaper and sells it at UGX 2,000. On a given day, the company produced 2000 copies and managed to sell 1000 copies only.

i. Did the company make a profit or loss on that day?

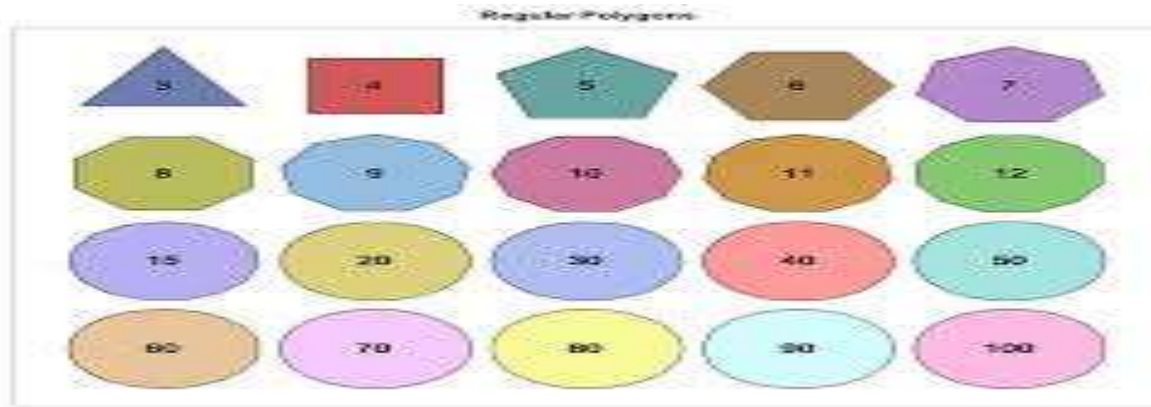ii. Calculate the percentage profit/ loss for the day.

6. Twice the age of John after 4 years is the same as four times his age 12 years ago. What could be John's present age.

7. Find the new position of a boy standing at a point (2, 5) if a mirror is placed vertically in front of him.

8. The interior angle sum of a regular polygon is 1800^0. How many sides has the polygon? Name the polygon.

Regular Polygons

9. A young boy was playing using straws which he arranged in groups of 2 four fours, 2 fours and 2 ones. How many straws did he have all together.

Adventures of Adam

10. Martin exercises every 12 days and Daniel every 8 days. Martin and Daniel both exercised today. How many days will it be until they exercise together again?

SECTION B
(Attempt all the Items in this Section)

11. An eagle flies from a window due North for 300km to the rooftop of a building . On seeing a chick on the ground it then flies on a bearing of 135^0 for 500km to pick it up. From there it flies away on a bearing of 060^0 for 200km to a nearby tree to have its meal.

i. Use a scale of 1cm to represent 50km, draw an accurate diagram to show the route of the bird.

ii. Find the distance between the rooftop and the mango tree.

12. In an election involving three candidates A, B and C, candidate A got 30% of the total valid votes, candidate B got $\frac{2}{5}$ of the total votes. 0.2 of the total votes were declared invalid. If candidate C got 60,000 votes number of votes. Find the number of;

a) total votes cast.

b) valid votes polled in favor of the candidate A.

c) valid votes polled in favor of the candidate B.

END