

Examination code:

THE REPUBLIC OF SOUTH SUDAN

JUBA INTER-SCHOOLS JOINT MOCK EXAMINATIONS

2023

Subject: Mathematics

Time: 2 Hours 30 Minutes

INSTRUCTIONS:

Read the following instructions carefully before answering any question.

1. Write your examination code in the box provided above.
2. Your name and the school name **MUST** not appear in this paper.
3. Read the questions carefully before answering.
4. All drawings must be done in pencils
5. All sections are compulsory
6. You will not be provided with any additional paper for rough work.
7. Use of electronic calculators is not allowed.
8. All your answers must appear on the same paper.

THIS TABLE IS FOR EXAMINER'S USE ONLY

Question No.	Marks	Marks obtained	Marked by	Checked by
One	15			
Two	15			
Three	15			
Four	20			
Five	20			
Six	15			
Total	100			

SECTION "A" (40 MARKS)

QUESTION ONE (15 MARKS)

A) Identify the place value of digit four in the number 6.245 (1mk)

B) Write 35% as a fraction in its lowest form. (1mk)

C) Workout the values of (2mk)

i. 4^2

ii. $\sqrt{\frac{81}{169}}$

D) What is a perfect square? (1mk)

E) List; (2mk)

i. All the positive factors of 12

ii. The prime numbers between 4 and 20

F) Convert $\frac{13}{20}$ to percentage (1mk)

G) A price rose from ssp. 50,000 to ssp. 70,000. What percentage increase is this? (3mk)

H) Round off 5684271 to the nearest thousands. (1mk)

I) If 12 tins weigh 30kg, how much will 6 tins weigh? (2mk)

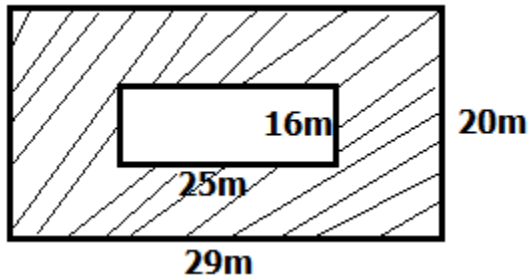
J) Evaluate $4\frac{2}{5} + 2\frac{1}{2}$ (1mk)

QUESTION TWO (15 MARKS)

A) Convert 300cm² to m² (2mk)

B) To fence a circular field of diameter 21m, a farmer erects poles after every 10m. Determine the number of poles the farmer requires to fence the field. (4mk)

- C) In the figure below, workout the area of the shaded region (4mk)



- D) Ayesha left home and walked for $1\frac{1}{3}$ hours at an average speed of 9km/h. she rested for 20 minutes and continued with her journey for 3 hours at an average speed of $4\frac{2}{15}$ km/h. what was her average speed for the whole journey? (4mk)

- E) Express 2205hours in 12 – hour clock system. (1mk)

QUESTION THREE (15 MARKS)

- A) If $a = 4$, $b = 2$ and $c = 3$. Find the value of; (2mk)

i. $4\left(\frac{6a+2c}{6b-c}\right)$

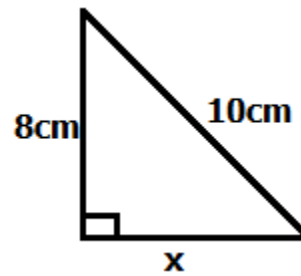
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QUESTION FOUR (20 MARKS)

A) Using a ruler, a pencil and a pair of compasses only, construct triangle PQR in which line PQ = 4.5cm, QR = 4cm and PR = 6cm. inscribe a circle inside the triangle PQR and measure its radius. (6mk)

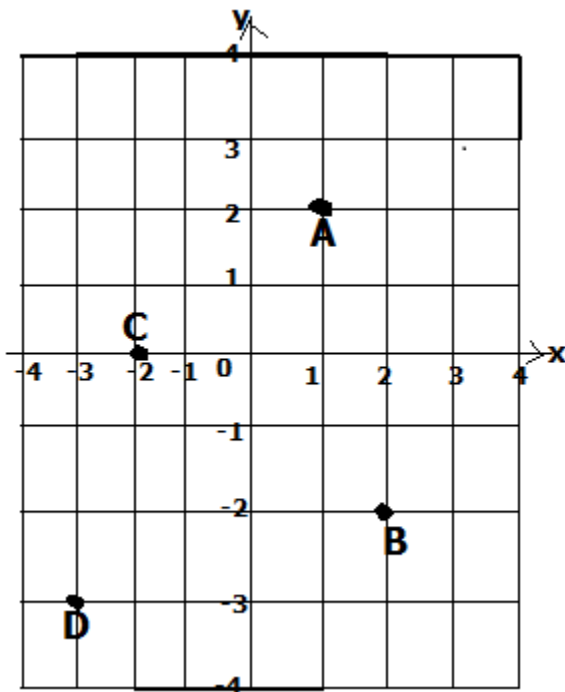
B) The figure below is a right – angled triangle



i. Find the value of x (4mk)

ii. Calculate its area (3mk)

- C) The figure below is a Cartesian plane.



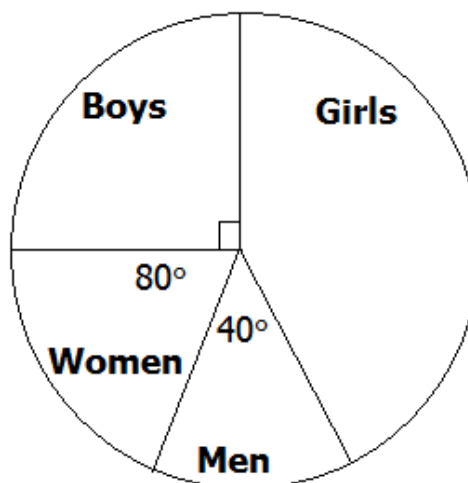
Identify the coordinates of the points; (4mk)

- i) A _____
 - ii) B _____
 - iii) C _____
 - iv) D _____
- D) Use a ruler, pair of compasses and a pencil only to construct an angle of 75° (3mk)

QUESTION FIVE (20 MARKS)

- A) There are 6 maize grains and 2 beans grains in a bag. What is the probability of picking a bean? (2mk)

- B) The population of an estate in a town is represented by the pie – chart below.



- i. What angle represents girls? (2mk)

- ii. Find the total population of the estate if there were 600 girls. (4mk)

- iii. How many more boys than men were there? (4mk)

- C) The daily attendance of class eight in a certain primary school was recorded from Monday to Friday respectively as;
40, 32, 38, 40, 30.

- i. Which day of the week was the attendance highest? (1mk)

- ii. Which day was the attendance lowest? (1mk)

- iii. Calculate the average mean attendance for the week. (3mk)

- iv. What was the mode? (1mk)

- v. Calculate the median attendance. (2mk)

QUESTION SIX (15 MARKS)

A) Nadia was paid a salary of ssp.

25,200 per month. She is also paid a commission of 9% on the value of goods sold. In one month she sold goods worth ssp. 150,000. What was the total money she got at the end of that month? (4mk)

B) Express the following scales in ratio form. (4mk)

i. 1cm represents 20m

ii. 1cm represents 9km

C) On 1st January 2017, Mark had a capital of ssp. 17,000. On 5th January, he bought paw paws for ssp. 2,400. On 7th January he bought oranges for ssp. 1,000 and mangoes for ssp. 2,000. By 10th January, he had sold paw paws for ssp. 5,000, oranges for ssp. 2,400 and mangoes for ssp. 4,000. On the same day (10th – January) he paid ssp. 700 for transport and ssp. 500 a market fee.

i. Prepare Mark's cash account as at 11th January and balance it. (5mk)

i. What was his balance on the 11th – January 2017? (1mk)

ii. Find his profit. (1mk)

THE END

