

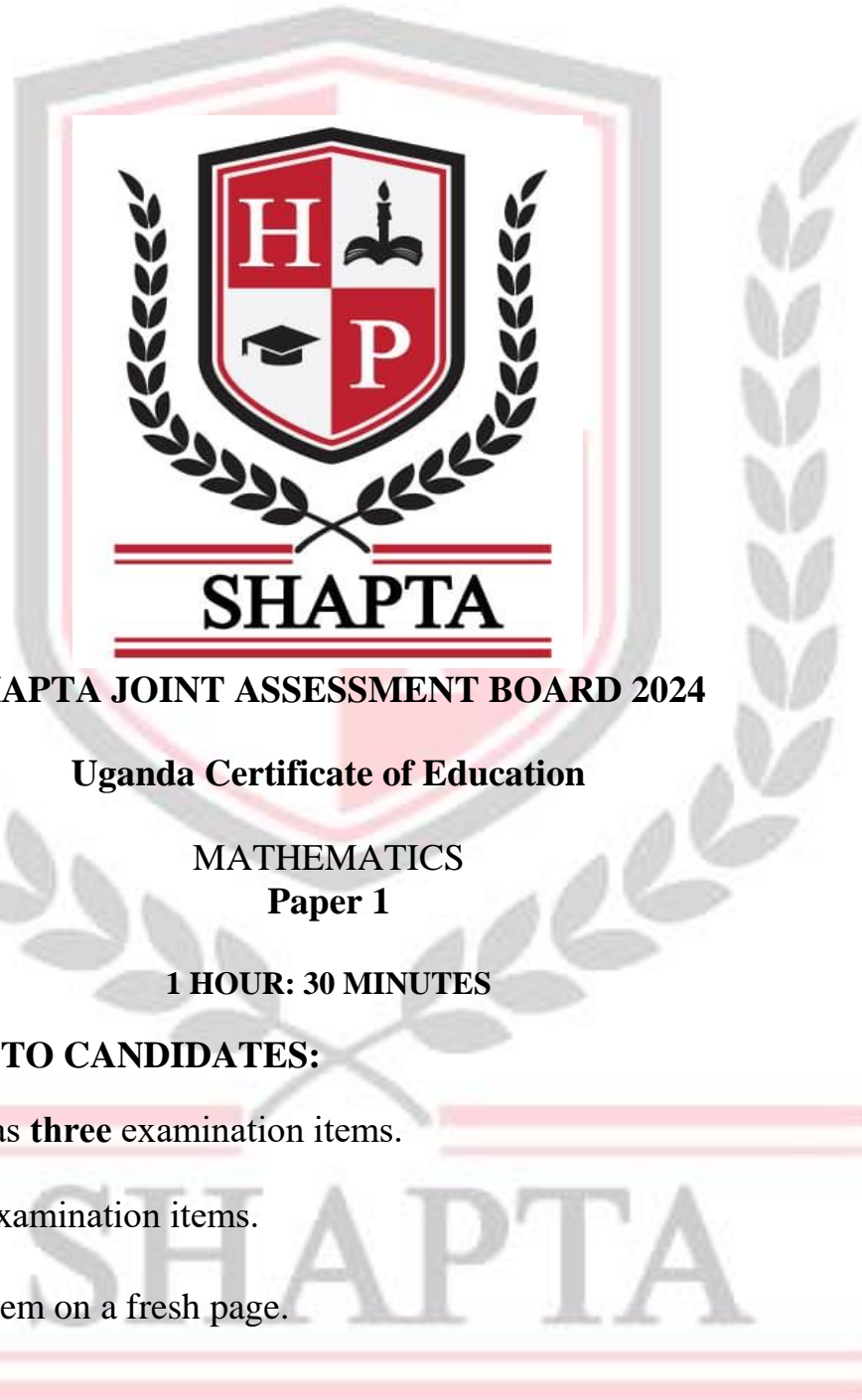
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MATHEMATICS

Paper 1

2024

1 hour: 30 Mins



SHAPTA JOINT ASSESSMENT BOARD 2024

Uganda Certificate of Education

MATHEMATICS

Paper 1

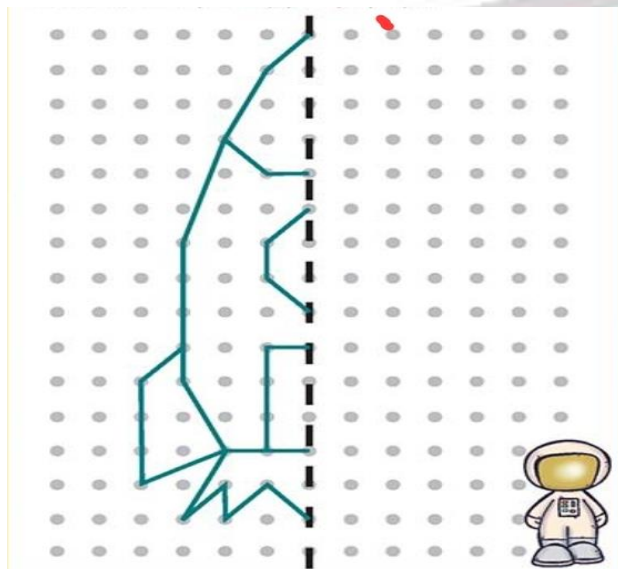
1 HOUR: 30 MINUTES

**INSTRUCTIONS TO CANDIDATES:**

- This paper has **three** examination items.
- Answer **all** examination items.
- Begin each item on a fresh page.

### ITEM ONE:

You were asked to draw a symmetrical picture in groups of two by your art teacher. Your group member finished her part as follows:



### TASK:

- a) Complete the teacher's assignment.

### ITEM TWO:

Your classmates are arguing whether to produce Sausages(S), or Popcorns (P), or cakes(C) or daddies (D) for the school project. To solve the argument, **your class teacher assigned you as the group manager to make research and present the findings on a diagram** and hence use it to decide. You questioned a group of 40 students from different classes of which product they prefer and below where there responses:

S	C	S	P	P	S	D	P	S	C
P	P	S	P	D	C	S	D	P	S
P	S	P	S	C	P	S	P	S	P
D	C	S	S	S	P	S	S	D	S

### TASK:

- a) Fulfill the teacher's assignment.

b) Which product do you think you and your fellow students will end up producing?

### ITEM THREE:

On your way to school from home, you plan to pass via you're friend's home to pick your book.

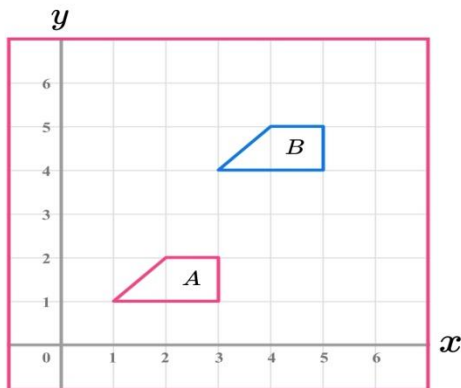
You travel by a motorcycle that travels at constant speed of **88km/hr**.

You want to decide on what time to leave home such that you reach school at **7:30am**.

On a grid map where each square is 1km, your home is located at coordinate (3, 3), your friend's home is at (2, 9) and your school at (7, 9).

As you were thinking of how to travel, you realized that your painting was shifted from position B to position A as shown below and hence would wish to shift it back.

B.



**NOTE:** Time in hours =  $\frac{\text{distance in km}}{\text{speed in km/hr}}$

### TASK:

- What time will you have to leave home for you to reach school on time?
- How will you shift you painting back to its original position?

**END.**