



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate Examination 2008

Technical Graphics
Ordinary Level
Section A
(120 marks)

Monday, 16 June
Morning 9:30 - 12:00

Instructions

- (a) Answer **any ten** questions in the spaces provided.
 All questions carry equal marks.
- (b) Construction lines must be clearly shown.
- (c) All measurements are in millimetres.
- (d) This booklet must be handed up at the end of the examination.
- (e) Write your examination number in the box provided below
 and on all other pages used.

Examination Number:

Centre Number

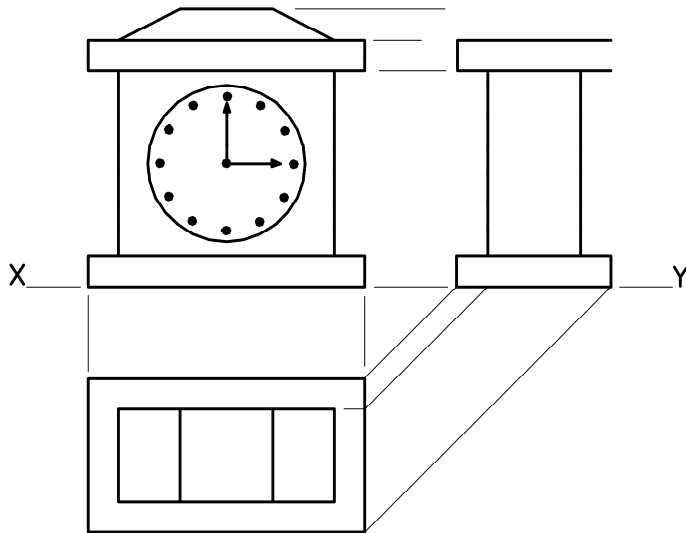
Question	Mark
Section A	
1	
2	
3	
4	
5	
6	
TOTAL	
GRADE	

SECTION A. Answer **any ten** questions. All questions carry equal marks.

1

Shown is the elevation, plan and **incomplete end view** of a clock.

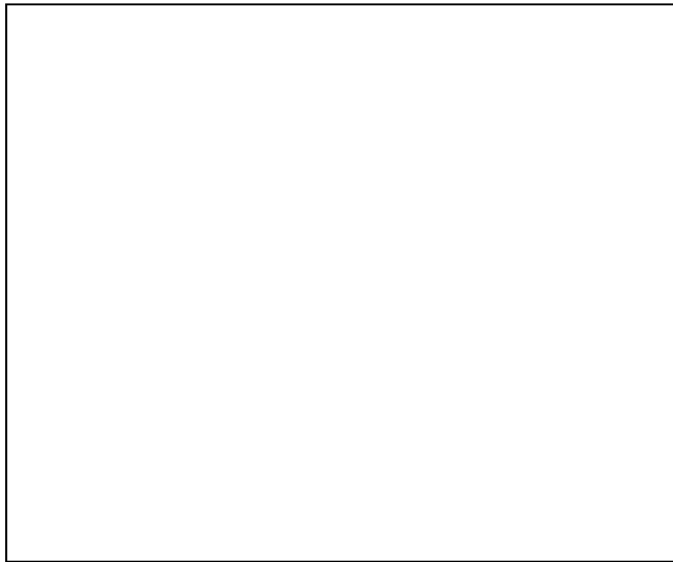
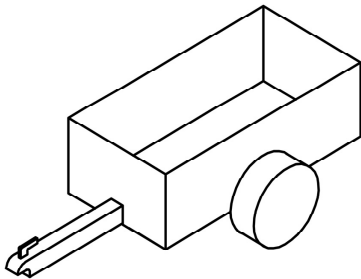
Insert the missing lines in the end view.



2

In the space provided, make a **freehand pictorial sketch** of the trailer shown.

Colour **or** shade the completed sketch.



3

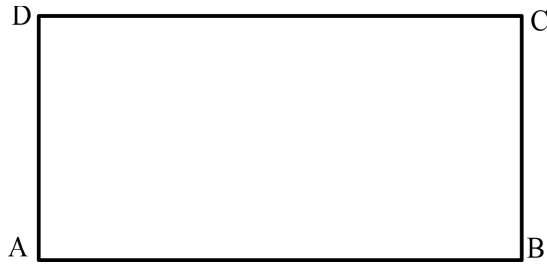
Name the computer device shown and state its use.



Name: _____

Use: _____

- 4 Convert the given rectangle **ABCD** to a triangle of equal area.



- 5 **Fig. 1** shows an elliptical mirror hanging from point **O**. The lines **PO** and **LO** are tangents to the ellipse.

Complete **Fig. 2** by drawing tangents to the ellipse at points **P** and **L**.

F and **F1** are the focal points of the ellipse.

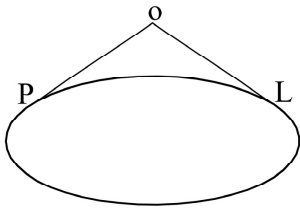


Fig. 1

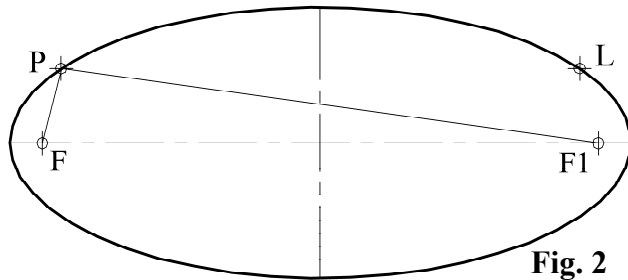


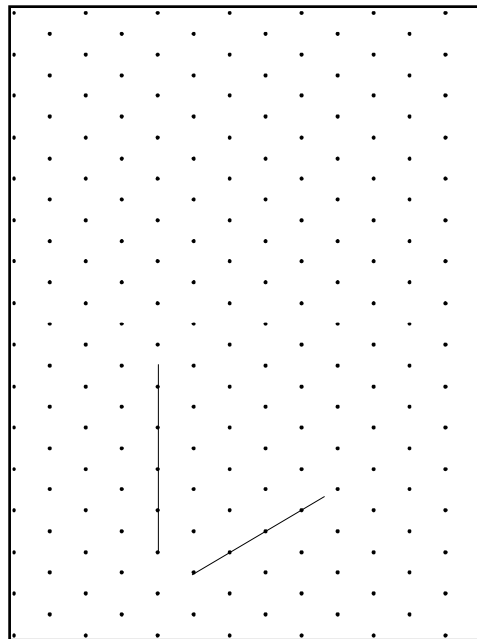
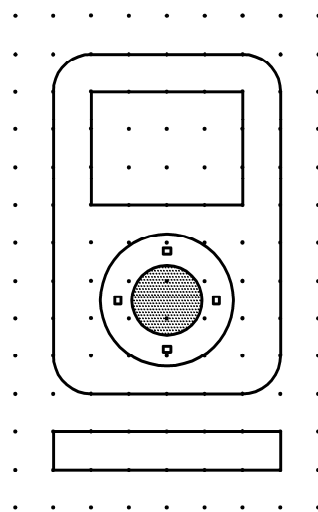
Fig. 2

6

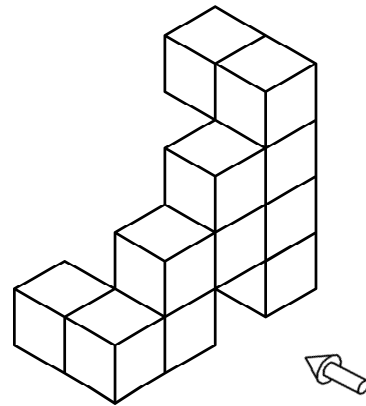
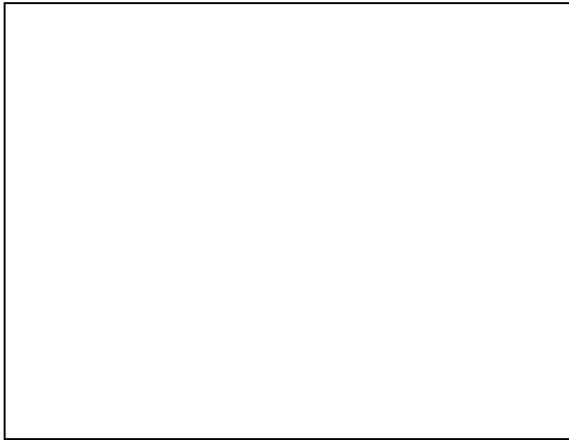
Shown is the elevation and plan of an MP3 player.

Draw a **freehand isometric sketch** of the MP3 player on the grid provided.

Colour **or** shade the completed sketch



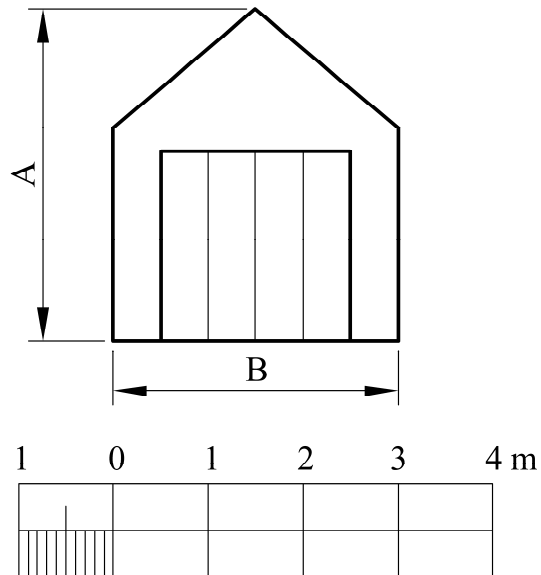
- 7 The figure shows a set of blocks.
Draw, in the space provided, an elevation of the blocks looking in the direction of the arrow.



- 8 Using the scale provided, **measure** and **write down** the dimensions **A** and **B** of the garage shown.

A: _____

B: _____

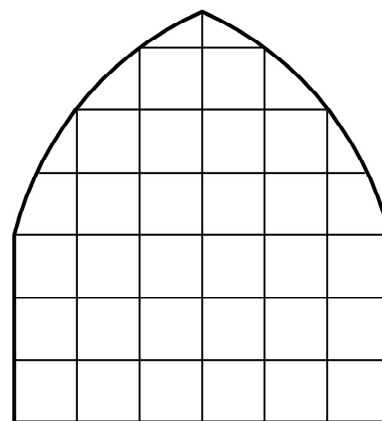


- 9 The figure shows the outline of a church window.

Write down the area of glass in the window in square metres.

1 square = 1 square metre.

Area of glass: _____ square metres.

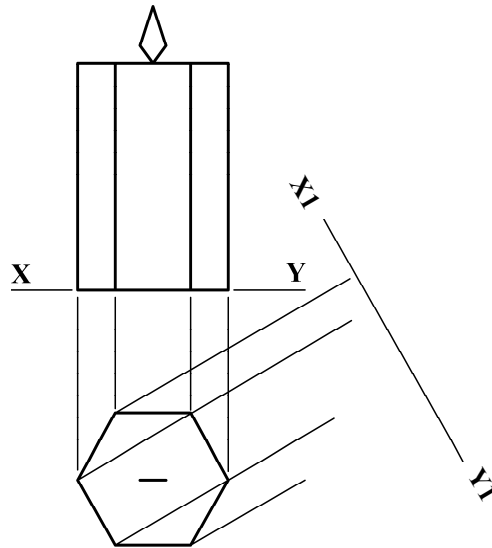


10

The elevation and plan of a candle are shown.

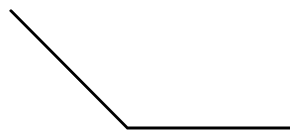
Complete the **auxiliary** elevation of the candle on the given **X1-Y1** line.

Note: It is not necessary to draw the flame in the auxiliary elevation.



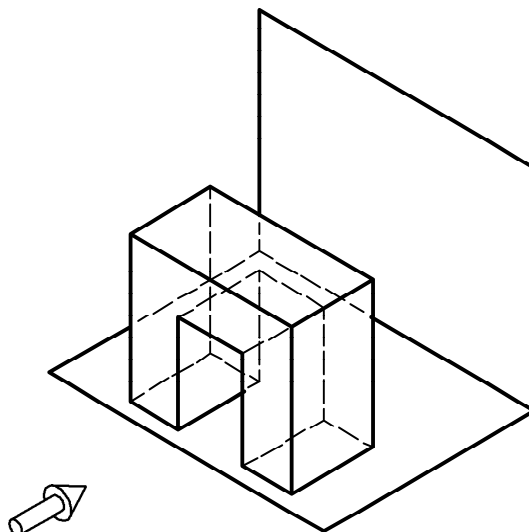
11

The diagram shows the base and one side of a regular octagon. Complete the regular octagon showing all construction lines.



12

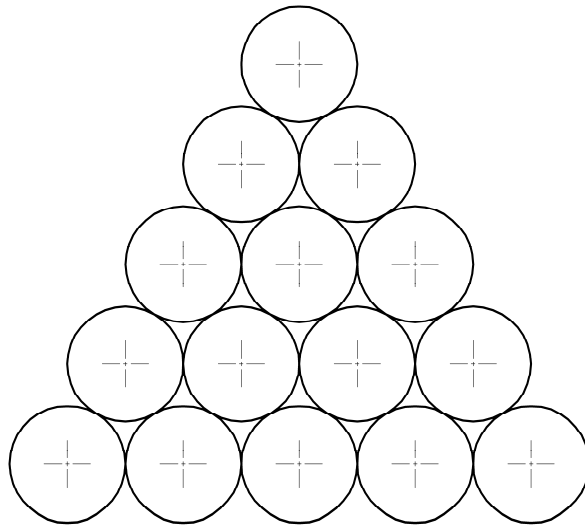
Project the **shadow** cast by the **doorway** when the direction of the light is parallel to the arrow.



13

The figure shows the outline of a set of snooker balls.

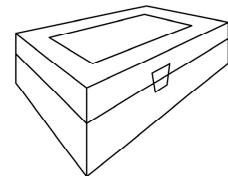
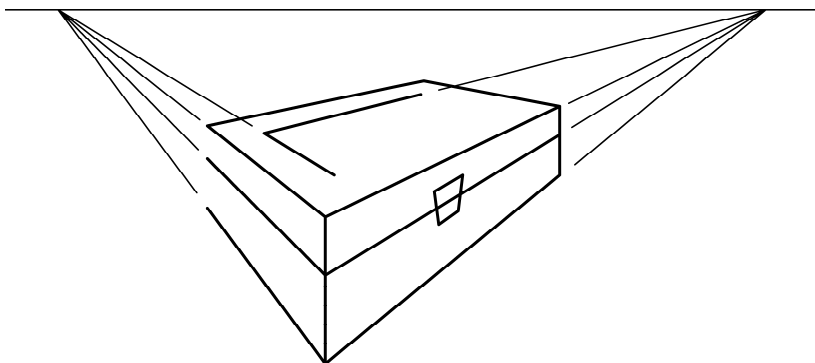
Show the points of contact between the snooker balls.



14

The figure shows an **incomplete** perspective drawing of a jewellery box. A sketch of the jewellery box is also shown.

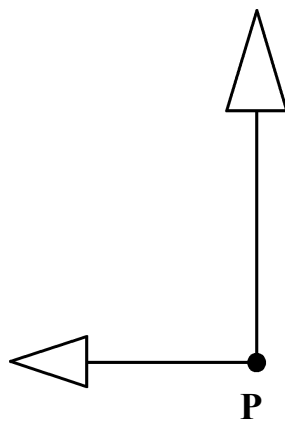
Complete the perspective drawing of the jewellery box.



15

The diagram shows the hands of a clock reading **9:00**.

Rotate the minute hand about the point **P** until the clock reads **9:15**.



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