



Pre-Junior Certificate Examination 2009

Technical Graphics
Ordinary Level
Section A
(120 marks)

Time : 2½ Hours

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 name, school and teacher in the boxes provided below and on all other pages used.*

Name:

School:

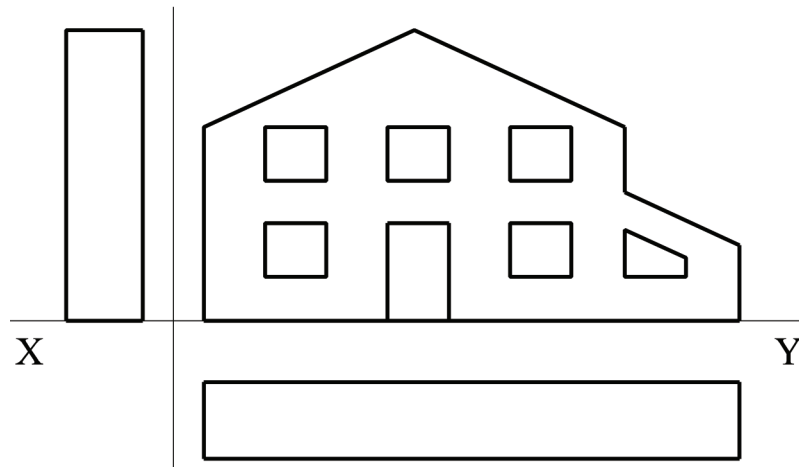
Teacher:

School Stamp

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

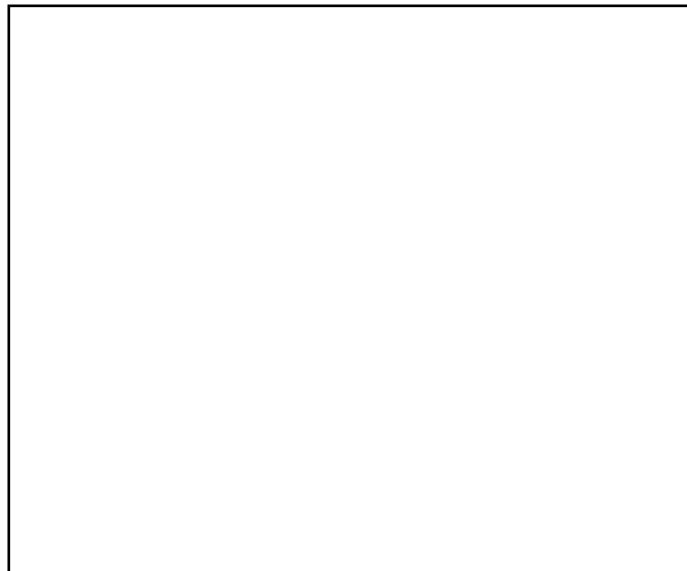
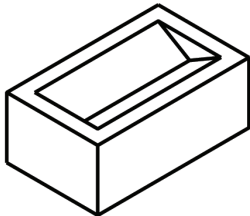
SECTION A. Answer **any ten** questions. All questions carry equal marks.

- 1** Shown are the elevation, **incomplete end elevation** and **incomplete plan** of a doll's house. **Insert** the missing lines in both the plan and end elevation.

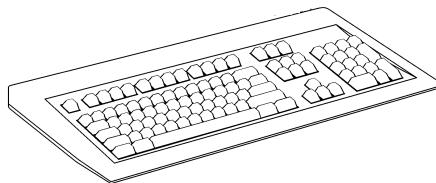


- 2** Make a **freehand pictorial sketch** of the paving brick in the space provided.

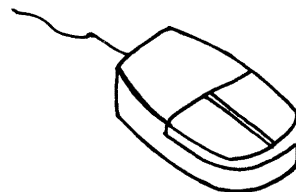
Colour **or** shade the completed sketch.



- 3** Name the computer components shown at **A** and **B** below.

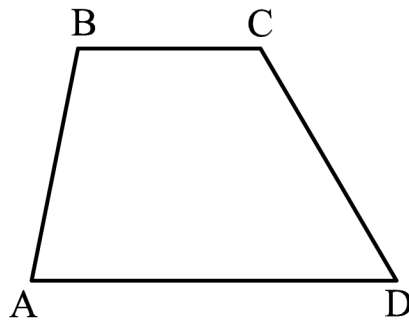


A : _____



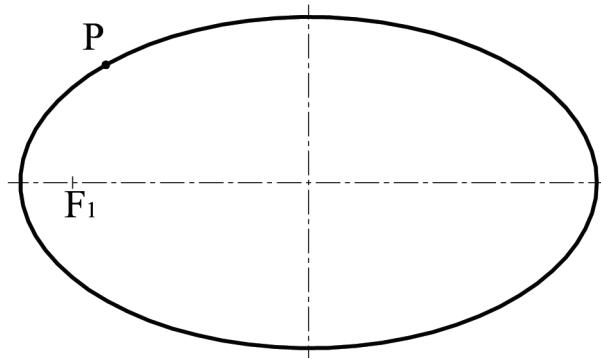
B : _____

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



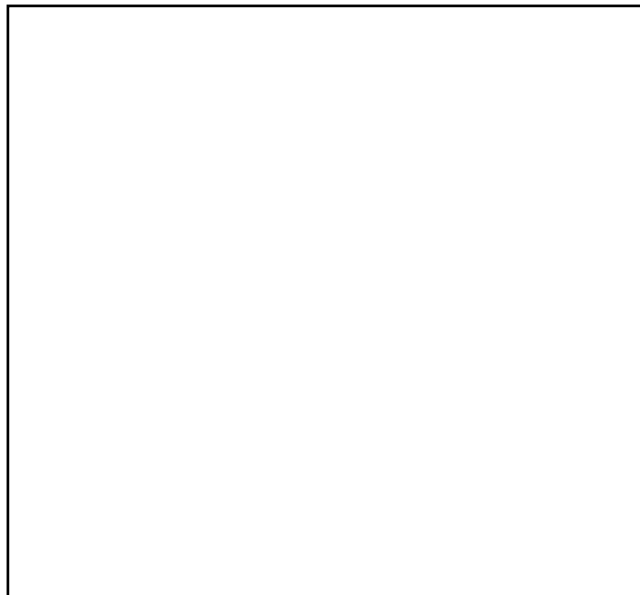
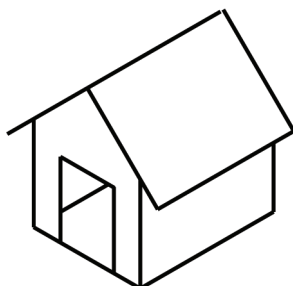
- 5 The figure shows an ellipse with focal point **F₁** and a point **P** on the curve.

Locate the focal point **F₂** and draw a tangent to the ellipse at point **P** showing clearly all construction lines.

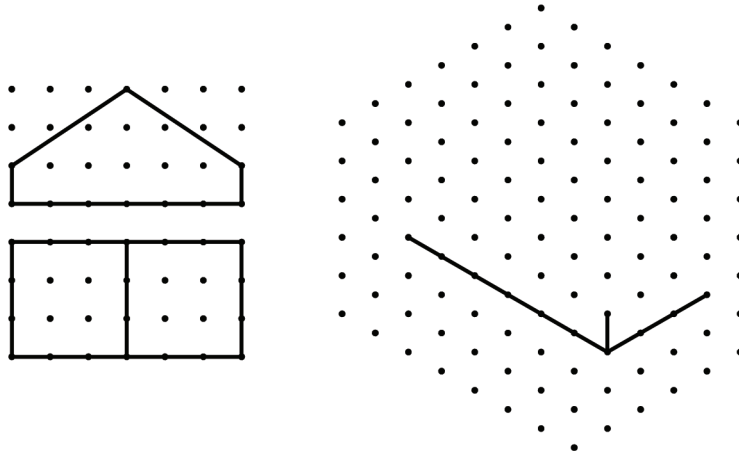


- 6 Shown is a pictorial drawing of a doghouse. Make a well proportioned **freehand sketch** of the doghouse in the space provided.

Colour **or** shade the completed sketch.



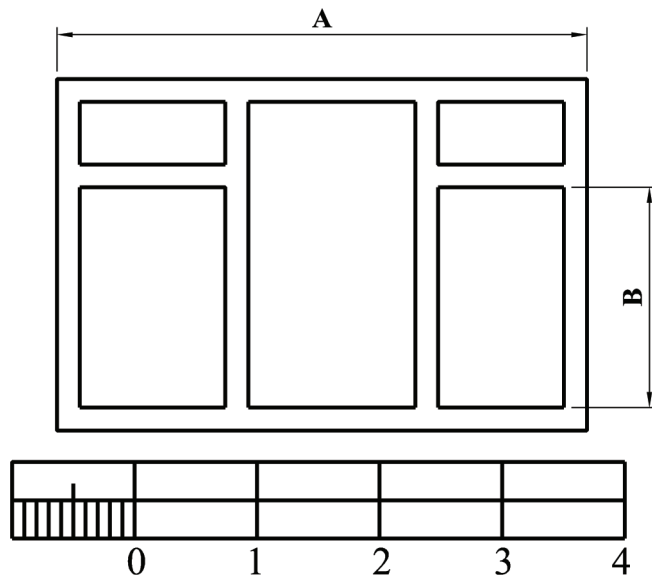
- 7 The elevation and plan of a tent are shown.
Complete the isometric view of the tent on the grid provided.



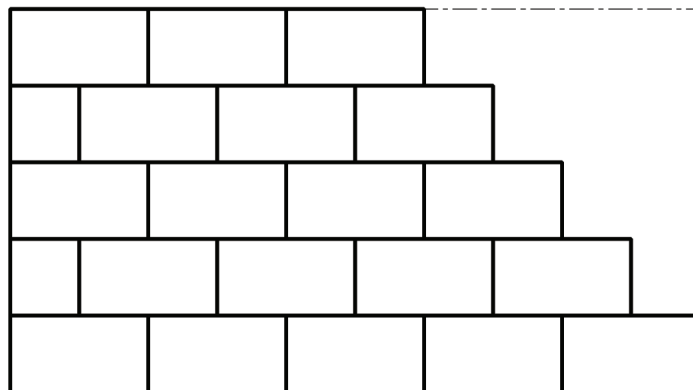
- 8 Using the scale provided,
measure and **write down**
 the dimensions **A** and **B**
 of the window shown.

A: _____

B: _____

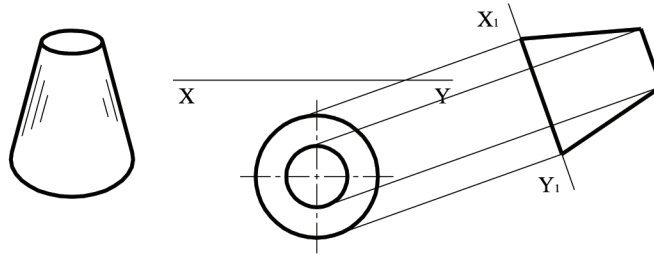


- 9 Shown is the outline plan of a patio which is being tiled. Determine the number of
 extra tiles required to complete the patio.



Answer: _____ tiles.

- 10** The plan and **auxiliary** elevation of a lampshade are shown. Also shown is a sketch of the lampshade. Draw an elevation of the lampshade on the given X-Y line



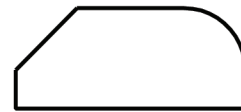
- 11** List the CAD commands used to change the figure A to B to C below.



A



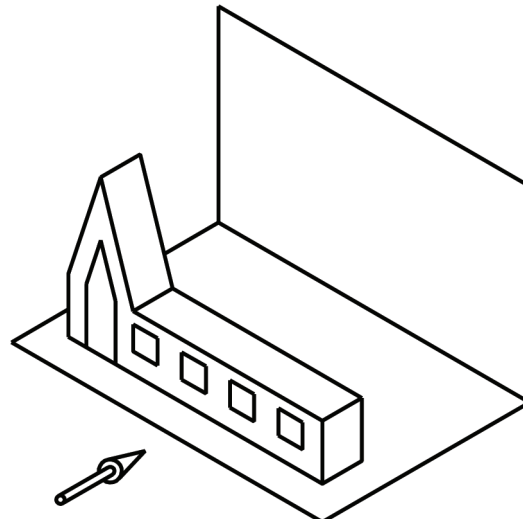
B



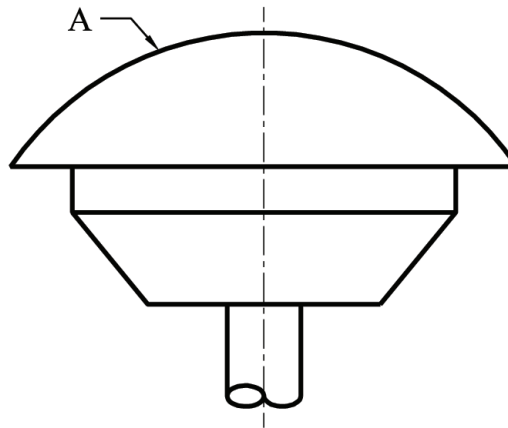
C

CAD Commands:

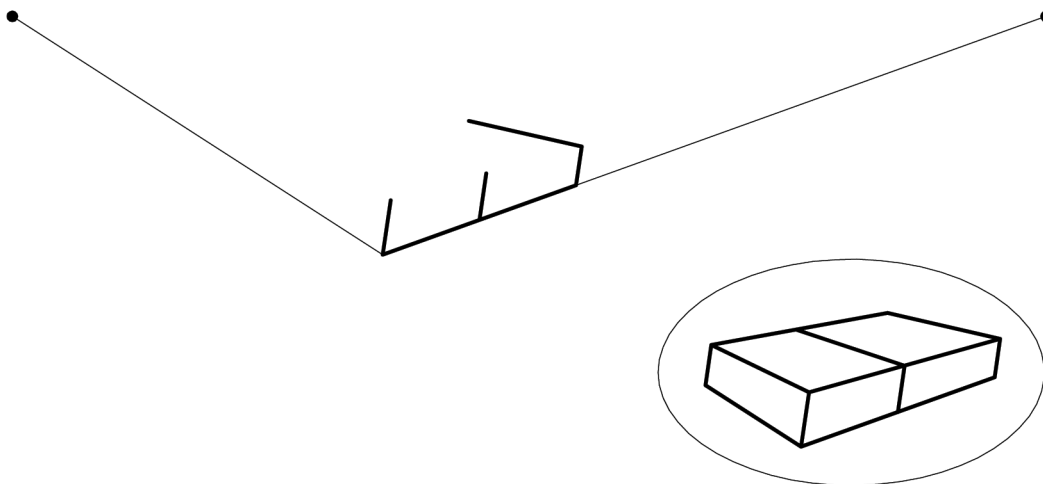
- 12** Project the **shadow** cast by the **church** when the direction of the light is parallel to the arrow.



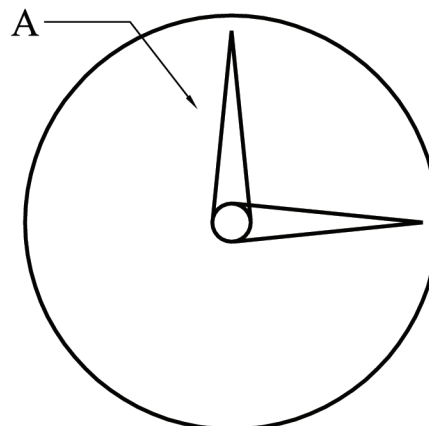
13 Shown is the outline view of a solar powered garden light. Show clearly how the centre of the arc **A** is found.



14 The figure shows an **incomplete** two point perspective of an eraser. Also shown is a sketch of the eraser. **Complete** the perspective drawing of the eraser.



15 The diagram shows the hands of a clock reading **3:00**. What time will it be if hand **A** rotates clockwise through an angle of **270 degrees**?



Time: _____

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