



Leaving Certificate Examination, 2009

Design & Communication Graphics Ordinary Level

Section A (60 Marks)

Friday, 12 June

Afternoon, 2.00 - 5.00

This examination is divided into three sections:

- SECTION A (Core - Short Questions)
SECTION B (Core - Long Questions)
SECTION C (Applied Graphics - Long Questions)

- SECTION A**
- Four questions are presented
 - Answer **any three** on the A3 sheet overleaf
 - All questions in Section A carry **20 marks**

- SECTION B**
- Three questions are presented
 - Answer **any two** on drawing paper
 - All questions in Section B carry **45 marks**

- SECTION C**
- Five questions are presented
 - Answer **any two** (i.e. the options you have studied) on drawing paper
 - All questions in Section C carry **45 marks**

General Instructions:

- *Construction lines must be shown on all solutions*
- *Write the question number distinctly on the answer paper in Sections B and C*
- *Work on one side of the drawing paper only*
- *All dimensions are given in metres or millimetres*
- *Write your Examination number in the box below and on all other sheets used*

Examination Number:

SECTION A - Core - Answer Any Three of the questions on this A3 sheet

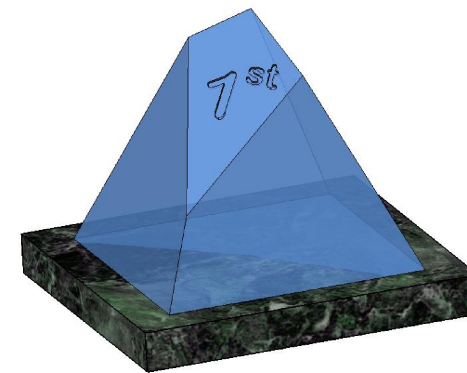
- A-1.** The 3D graphic below shows a typical satellite dish which is in the shape of a parabola.

On the drawing on the right draw the outline of the parabola in the rectangle ABCD. The vertex of the parabola should be positioned at V.



- A-3.** The 3D Graphic below shows a trophy consisting of a shaped glass pyramid on a marble base. The projections of the glass portion are shown on the right. The pyramid is cut by the oblique plane VTH as shown.

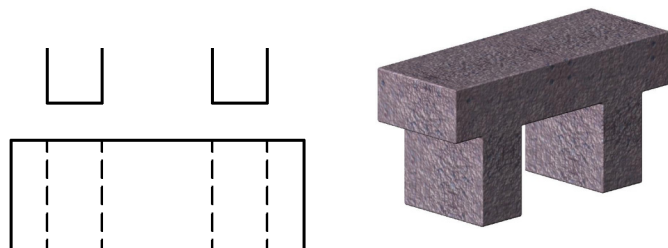
- (a) Complete the elevation.
- (b) Draw the true shape of the cut surface of the pyramid.



- A-2.** The plan and elevation of a garden seat are shown below. A 3D graphic is also given.

A set of isometric axes is shown on the right and the elevation of the object has been positioned relative to the axes as shown.

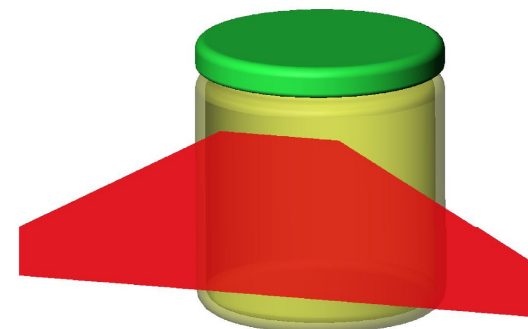
Draw the plan in its correct position and complete the axonometric projection.



- A-4.** The 3D graphic below shows a glass jar and a label which is to be wrapped around it.

The drawing on the right shows the plan and elevation of the label and the cylindrical portion of the glass jar.

Complete the elevation showing the label in the wrapped position.



A contour plot showing the level sets of a function. The plot features several nested, roughly elliptical contour lines, indicating a local minimum or maximum. The contours are labeled with values: 10, 15, 20, 25, 30, 35, 40, 45, and 50. The values increase as one moves away from the center of the innermost contour. Four points are marked on the plot: A and B are on a horizontal dashed line at the top, with A on the left and B on the right. C and D are on a horizontal dashed line at the bottom, with D on the left and C on the right. The background of the plot is light blue.