



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2010

Design & Communication Graphics
Ordinary Level

Section A (60 marks)

Friday, 18 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** each.

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

- 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** each.

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.*

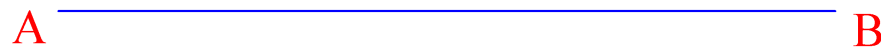
Examination Number:

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

A-1. The 3D graphic on the left below shows a tennis racket. The head of the racket is an ellipse.

On the drawing on the right, AB is the major axis for the ellipse and a portion of the curve is already drawn.

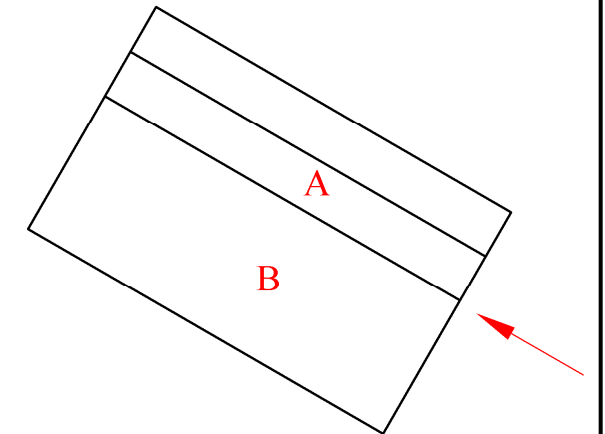
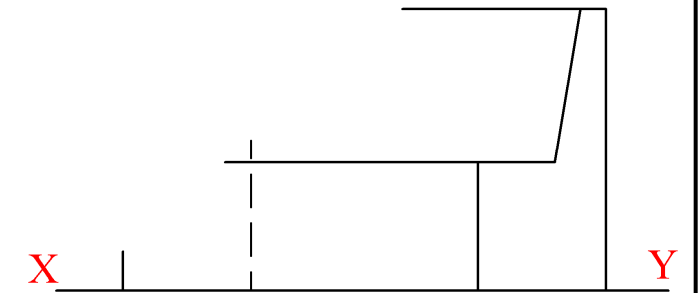
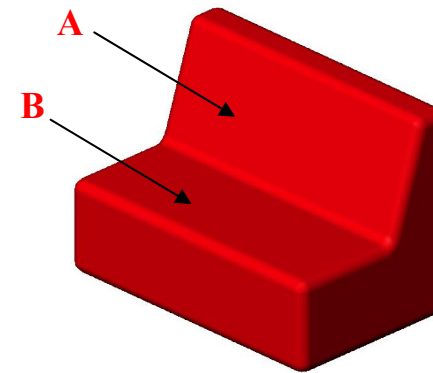
- (a) Locate the minor axis and construct the complete ellipse.
- (b) Find the focal points for the ellipse.



A-3. The 3D graphic below shows a modern seat from a hotel lobby.

The plan and incomplete elevation of the seat are shown on the right.

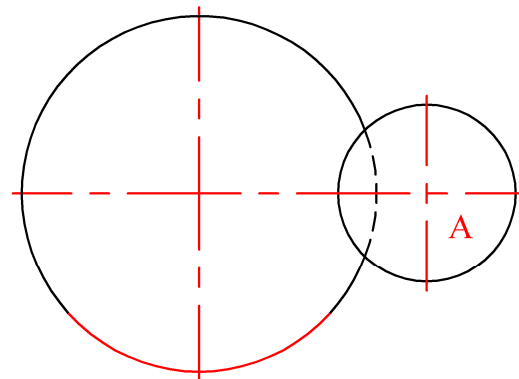
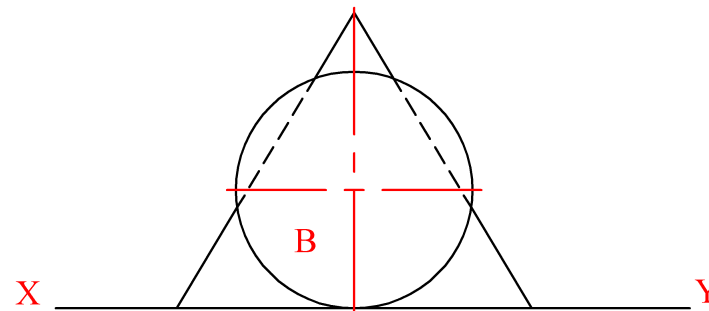
- (a) Complete the elevation.
- (b) Draw an auxiliary view of the seat which will show the true angle between the surfaces A and B.



A-2. The 3D graphic below shows a training cone which is in contact with a football (A) and a basketball (B) as shown. The three items rest on the floor.

The drawing on the right shows the plan and elevation of the cone. Sphere A is also shown in the plan and sphere B is shown in the elevation.

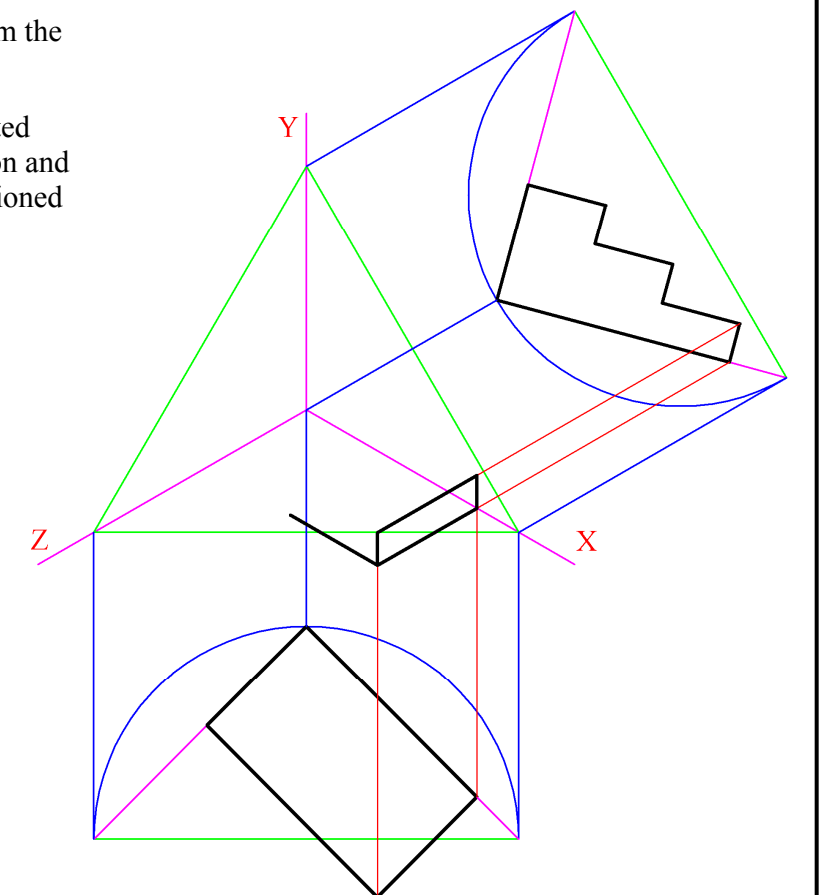
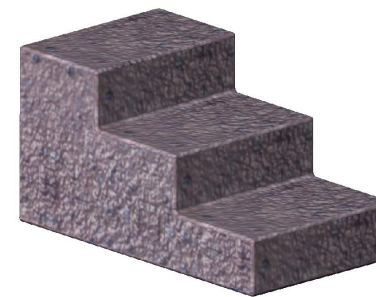
- (a) Draw the elevation of sphere A.
- (b) Draw the plan of sphere B.



A-4. The 3D graphic below shows three steps from the entrance to a building.

A set of isometric axes and partially completed drawing are shown on the right. The elevation and incomplete plan of the steps have been positioned relative to the axes as shown.

- (a) Complete the plan of the object.
- (b) Complete the axonometric projection.



**This Contour Map is part of Section C
and should only be used for the
answering of the Geologic Geometry
Option (Question C-1).**

