

Pre-Junior Certificate Examination 2009

Technical Graphics

Ordinary Level

Section B

(280 marks)

Time : 2½ Hours

Instructions

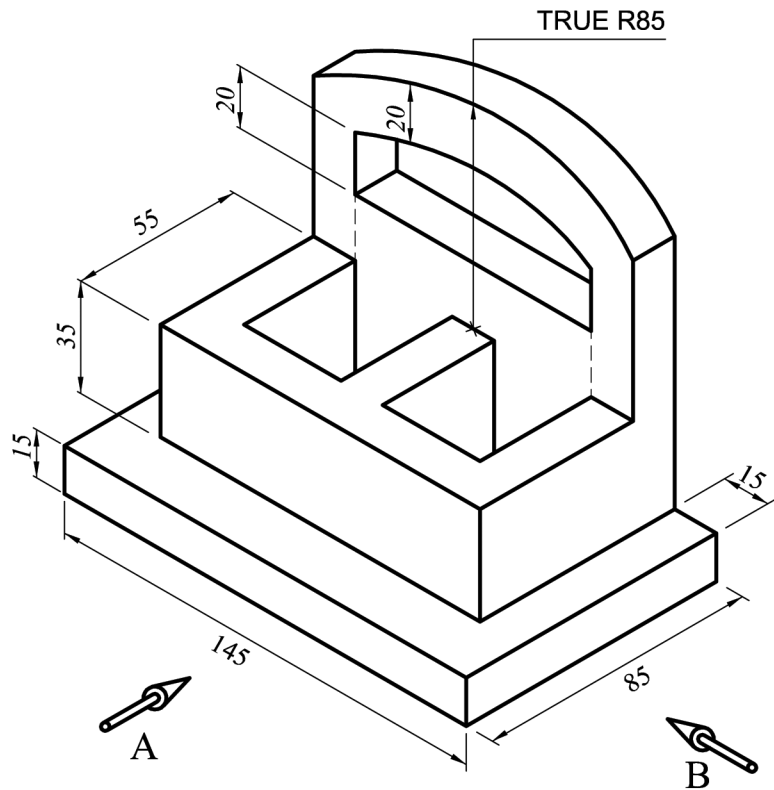
- (a) Answer **any four** questions. All questions carry equal marks.*
- (b) The number of the question must be distinctly marked by the side of each answer.*
- (c) Work on **one side** of the answer paper only.*
- (d) Write your **name, teacher and school** on each sheet of paper used.*

SECTION B. Answer **any four** questions. All questions carry equal marks.

1 The figure shows the outline of a **salt and pepper holder**.

Draw:

- (a) A front elevation looking in the direction of arrow **A**.
- (b) An end elevation looking in the direction of arrow **B**.
- (c) A plan projected from the front elevation.



Insert **any four** dimensions.

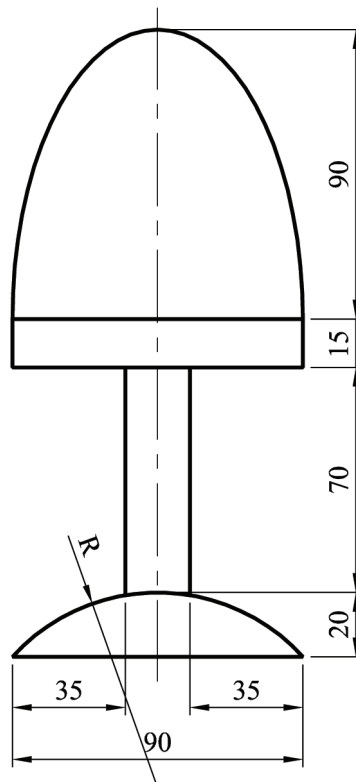
Note: The thickness of all walls and base is 15mm.

2

The figure shows the design of a lamp based on a semi-ellipse as shown.

The **major axis** of the ellipse is 180mm and the **minor axis** is 90mm.

Draw the given design showing clearly all construction lines.

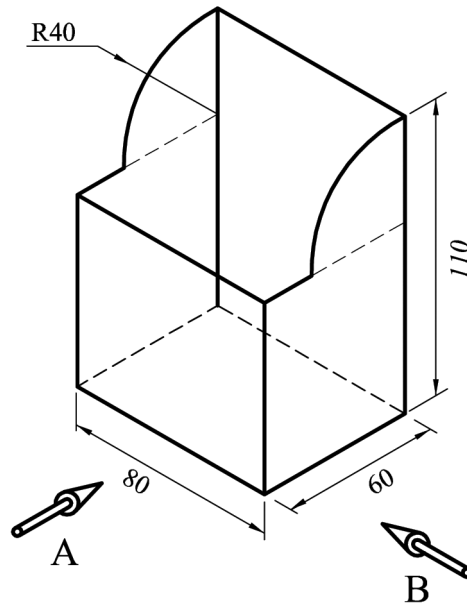


3

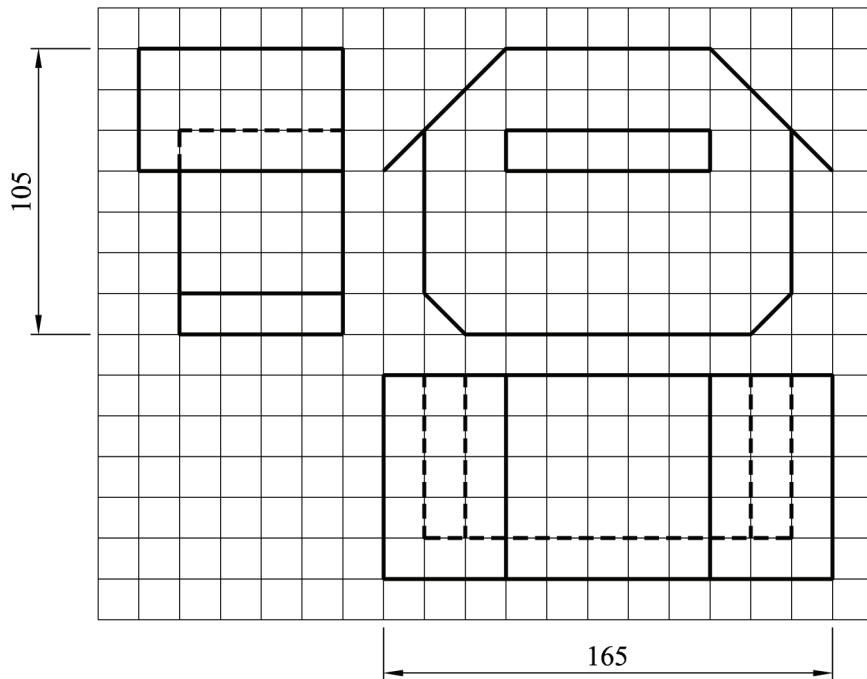
The figure shows the outline of a pencil holder.

Draw:

- (a) A front elevation looking in the direction of arrow **A**.
- (b) An end elevation looking in the direction of arrow **B**.
- (c) The complete **surface development** of the pencil holder.



4



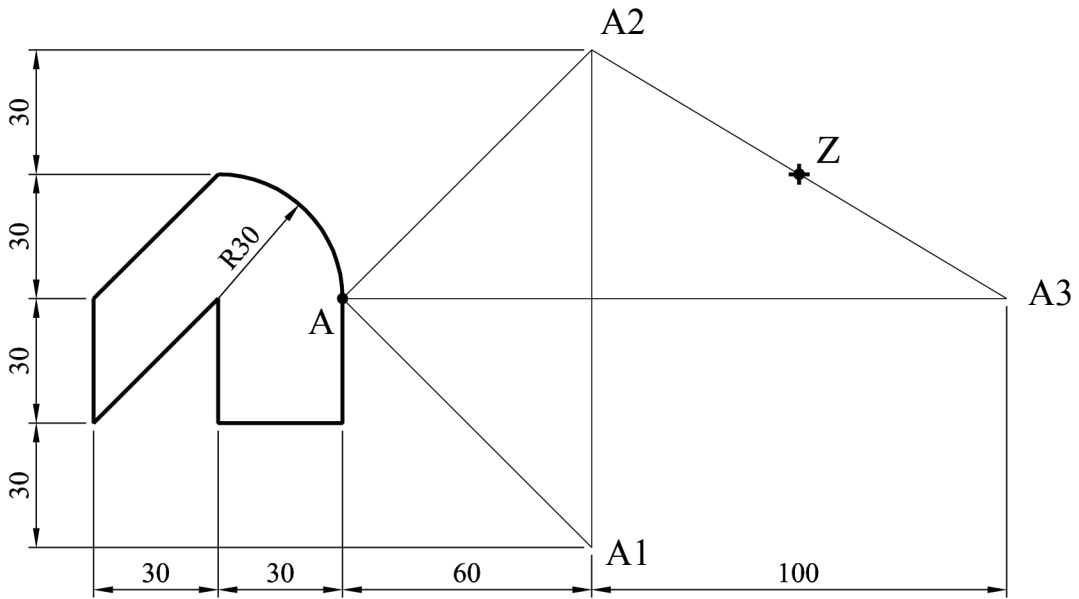
The figure shows the elevation, plan and end view of a letter box.
The grid is made up of 15mm squares.

Draw **one** of the following views:

- (a) An **isometric** view;
- or**
- (b) An **oblique** view of the letter box.

Note: The solution must be presented on standard drawing paper.

5



Draw the given figure.

Locate the points **A**, **A1**, **A2**, **A3** and **Z**.

Find the image of the given figure under the following transformations:

- (a) From point **A** to **A1** by a **translation**;
- (b) From point **A1** to **A2** by an **axial symmetry** in the line **A–A3**;
- (c) From point **A2** to **A3** by a **central symmetry** in the point **Z**.

6

The figure shows the design of an **electric kettle**.

Reproduce the given design, showing clearly all construction lines and points of contact.

