



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Junior Certificate Examination, 2019

Technical Graphics
Ordinary Level
Section B
(280 marks)

Monday, 17 June
Morning 9:30 - 12:00

Instructions

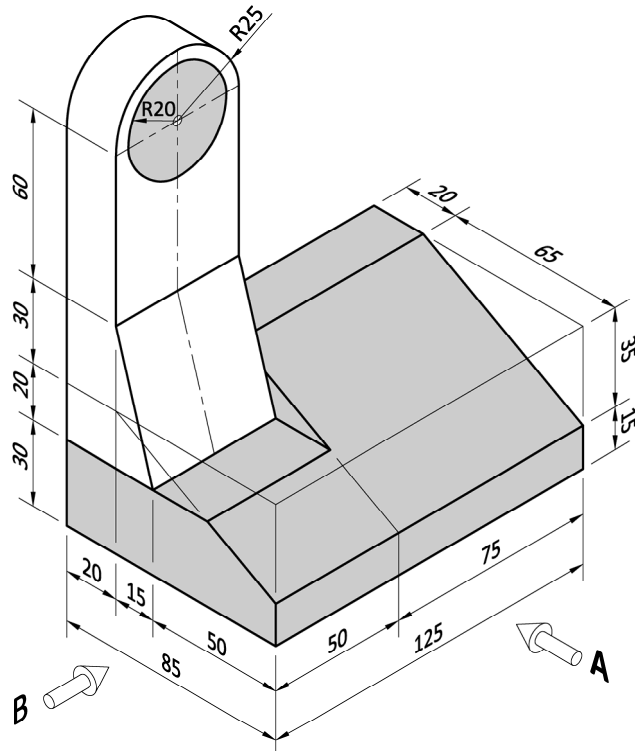
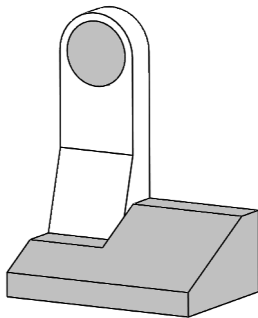
- (a) Answer **any four** questions. All questions carry equal marks.
- (b) The number of the question must be distinctly written by the side of each answer.
- (c) Work on **one side** of the answer *paper* only.
- (d) Write your examination number on each sheet of paper used.

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

1. The figure shows a design for a cordless phone.
A 3D graphic of the phone is also shown.

Draw:

- An elevation in the direction of arrow A.
- An end view in the direction of arrow B.
- Insert **any four** dimensions.



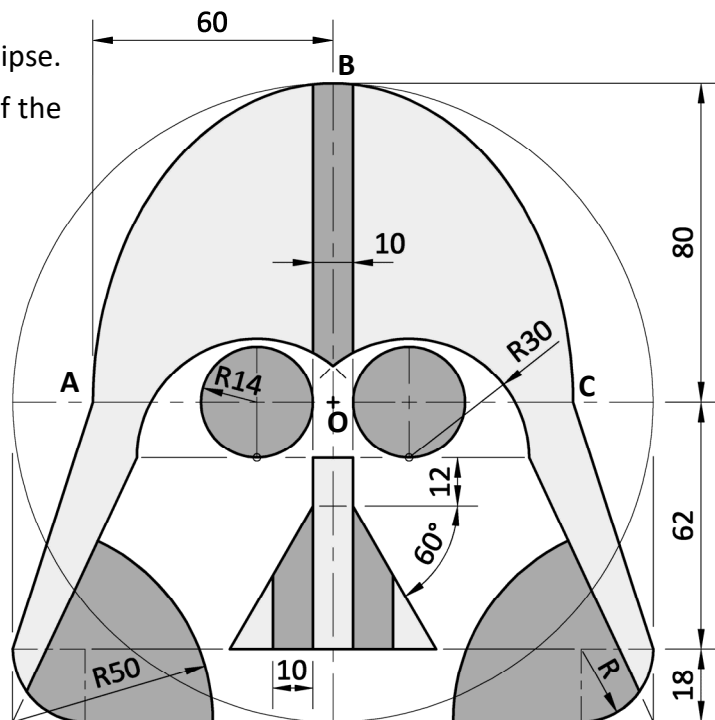
2. The graphic shows an outline design for a **Darth Vader** helmet.
The design is based on an ellipse and circles as shown.

The curve **ABC** is a semi-ellipse.

BO is half the **major axis** of the ellipse and is 80 mm long.

AO is half the **minor axis** and is 60 mm long.

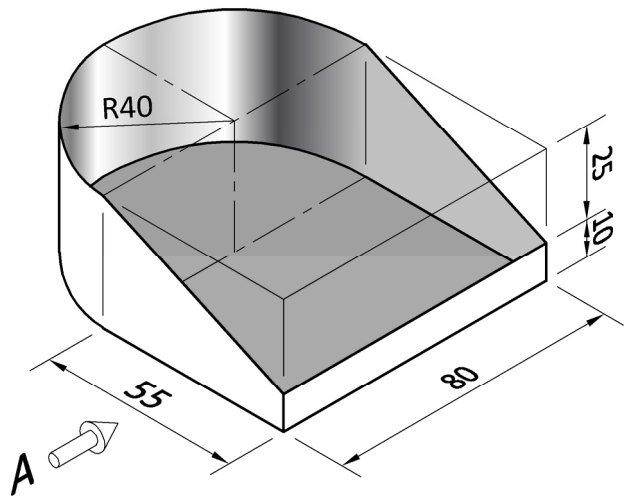
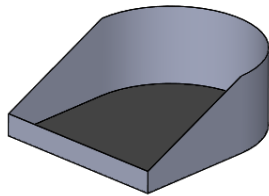
Draw the given semi-ellipse and complete the design showing all constructions.



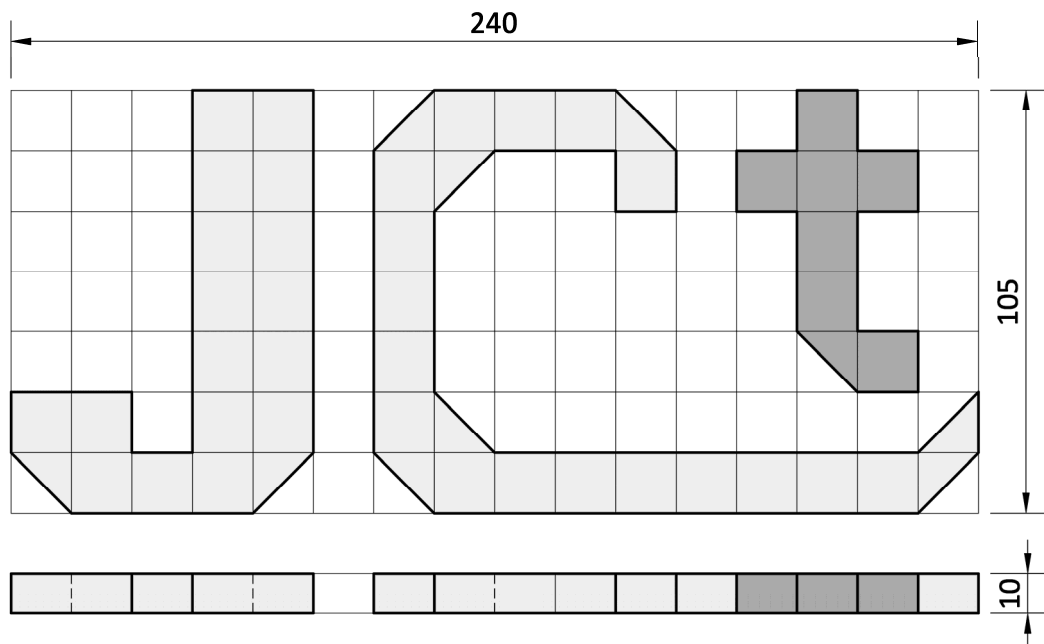
3. The graphics show a child's ball pond.

Draw:

- (a) An elevation in the direction of arrow A.
- (b) A plan projected from the elevation.
- (c) The complete **surface development** of the ball pond.



4.



The figure shows the elevation and plan of the Junior Cycle for Teachers (JCT) logo.
The grid in elevation is made up of 15 mm squares and the thickness in plan is 10 mm.

- Draw **one** of the following views:
- (a) An **isometric** view of the logo.
 - or
 - (b) An **oblique** view of the logo.

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

