

**B**

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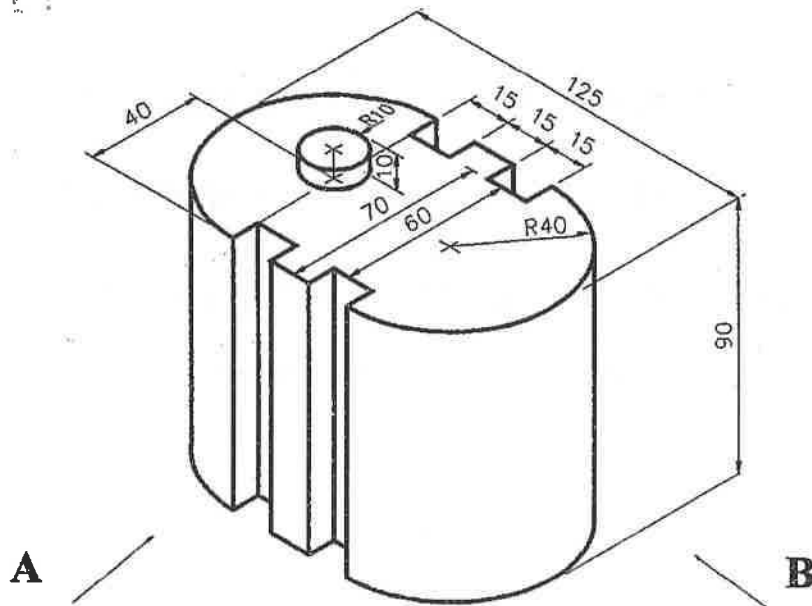
1 1992

**JUNIOR CERTIFICATE EXAMINATION, 1999****TECHNICAL GRAPHICS — ORDINARY LEVEL****THURSDAY 17 JUNE — MORNING, 9.30 — 12.00****SECTION B — 280 MARKS****INSTRUCTIONS FOR SECTION B**

- (a) Any four questions to be answered.
- (b) All questions in this Section carry equal marks.
- (c) The number of the question must be distinctly marked by the side of each question.
- (d) Work on one side of the paper only.
- (e) Examination number must be distinctly marked on each sheet of paper used.

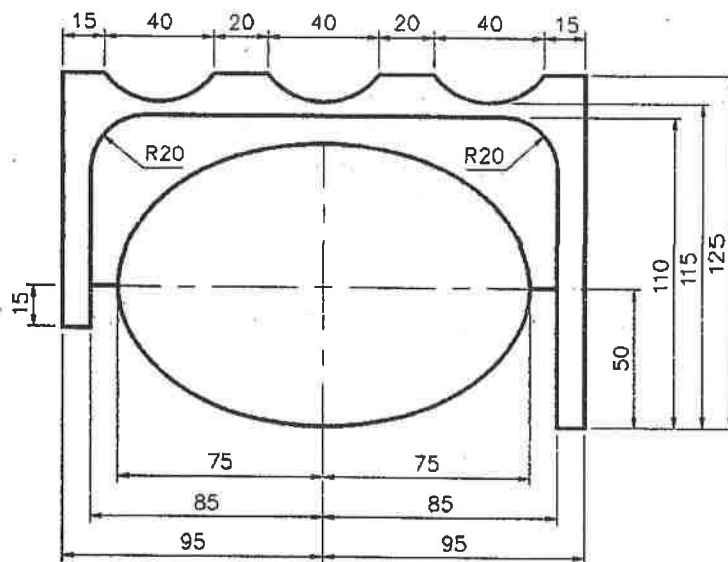
**SECTION B** (ANSWER ANY FOUR QUESTIONS- ALL QUESTIONS CARRY EQUAL MARKS)

1



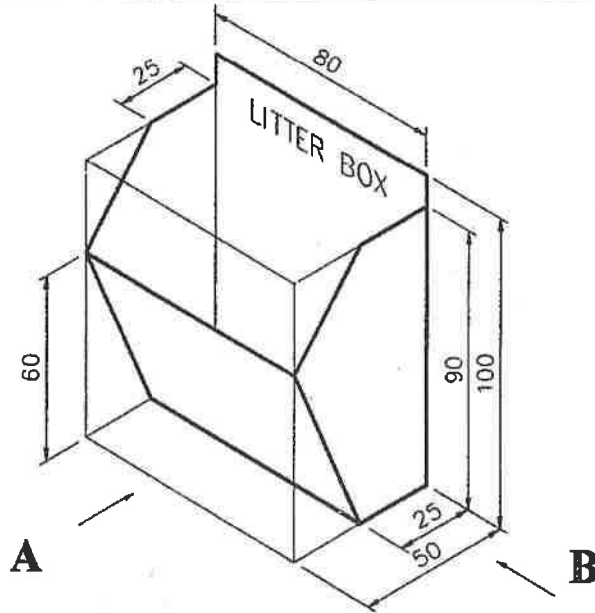
The figure shows the outline of an **OIL STORAGE TANK**. Draw **FULL SIZE** :-  
 (a) A front elevation looking in the direction of arrow A.  
 (b) An end elevation looking in the direction of arrow B.  
 (c) A plan projected from the front elevation.  
 Insert any **FOUR** dimensions.

2



The figure shows the design for a **SHOP SIGN** in the shape of an **ELLIPSE**. The Major Axis is 150mm and the Minor Axis 100mm. Draw **FULL SIZE** the given design showing clearly all construction lines and points of contact.

3

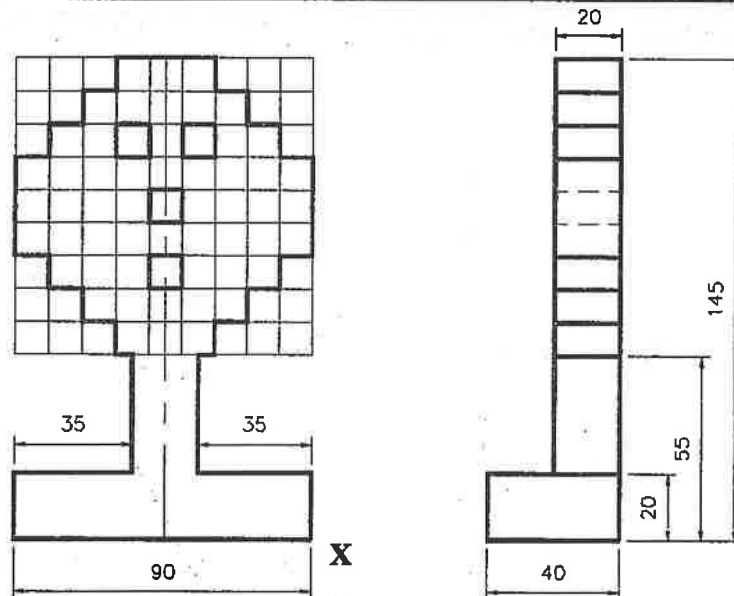


The figure shows the outline of a **LITTER BOX**.

Draw **FULL SIZE** the following views :-

- (a) A front elevation looking in the direction of arrow A.
- (b) An end elevation looking in the direction of arrow B.
- (c) The **DEVELOPMENT** of the **LITTER BOX**.

4



The figure shows a **COMPUTER GAME SHOW AWARD**. Each square on the graph is 10mm x 10mm. Draw **FULL SIZE ONE** of the following views :-

- (a) An **ISOMETRIC VIEW** of the Award, with Point X the lowest point.

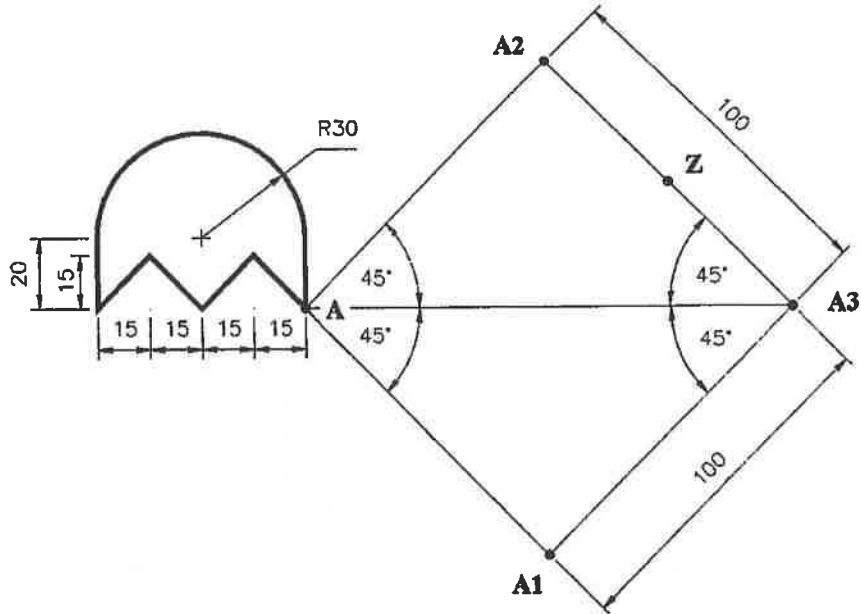
**OR**

- (b) An **OBLIQUE VIEW**.

The solution must be presented on standard drawing paper.



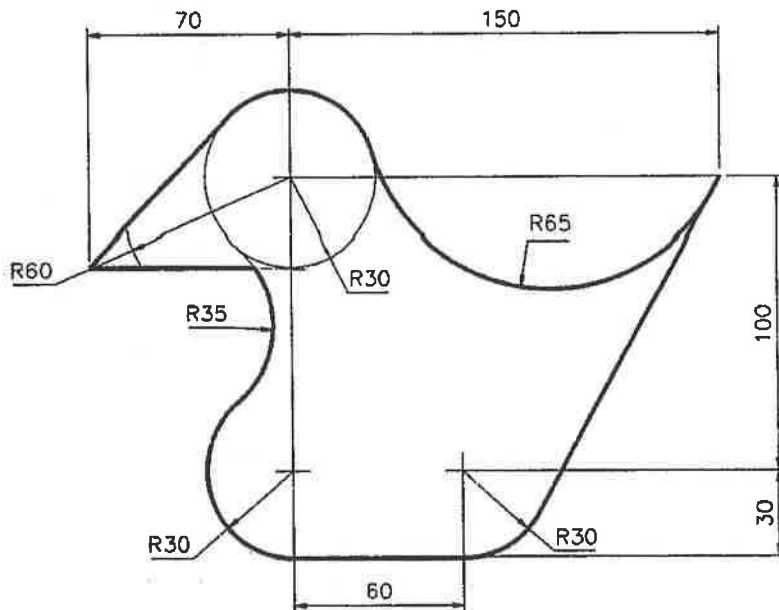
5



Draw the given figure. Locate the image points  $A_1$ ,  $A_2$ ,  $A_3$  and, then, find the image of the given figure under the following transformations :-

- (a) From point  $A$  to  $A_1$  by a **TRANSLATION**,
- (b) From point  $A_1$  to  $A_2$  by an **AXIAL SYMMETRY** in the line  $AA_3$ ,
- (c) From point  $A_2$  to  $A_3$  by a **CENTRAL SYMMETRY** in the point  $Z$ .

6



A design for a **CHILD'S TOY** is shown. Reproduce the given figure, showing clearly all constructions and points of contact.