

An Roinn Oideachais agus Eolaíochta

S 60 AL

A JUNIOR CERTIFICATE EXAMINATION, 2000
TECHNICAL GRAPHICS — ORDINARY LEVEL
THURSDAY 15th JUNE - MORNING, 9.30 — 12.00
TOTAL MARKS 400 (Section A and B)

2.

EXAMINATION NUMBER 

CENTRE STAMP 

INSTRUCTIONS

(a) Answer any ten of the short answer questions in Section A (120 marks) using the spaces provided.
 All questions in Section A carry equal marks.

(b) Answer any four of the six questions in Section B (280 marks).
 All questions in Section B carry equal marks.



(c) Examination Number must be distinctly marked in the space provided above and on each sheet of paper used.

(d) All construction lines must be clearly shown.

(e) All measurements are in millimetres.

(f) Hand up this answer book (Section A) at the end of the examination.

For Examiner's use only

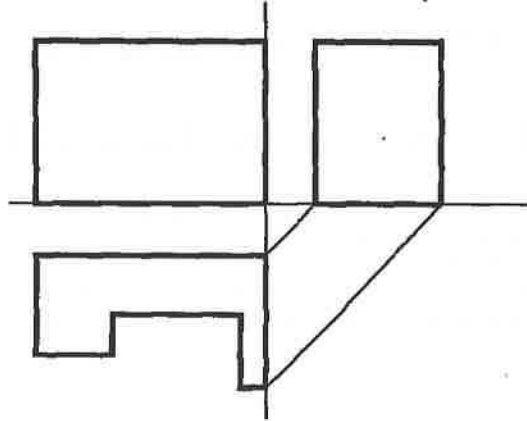
QUESTION	MARK
Section A (Total)	
Section B Q1	
Q2	
Q3	
Q4	
Q5	
Q6	
TOTAL 	
GRADE 	

WARNING

THIS ANSWERBOOK MUST BE HANDED UP
 AT THE END OF THE EXAMINATION
 OTHERWISE MARKS WILL BE LOST

SECTION A ANSWER ANY TEN QUESTIONS - ALL QUESTIONS CARRY EQUAL MARKS

1 Draw the missing lines in the elevation and in the end elevation.



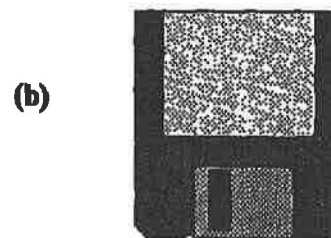
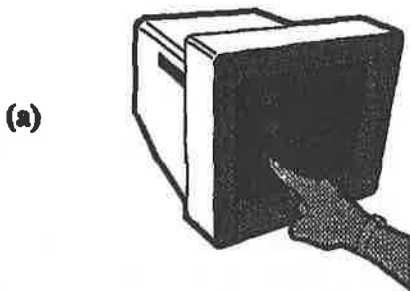
2 Name ONE CAD command which will result in A changing to B in each of the examples, below.



(i) _____

(ii) _____

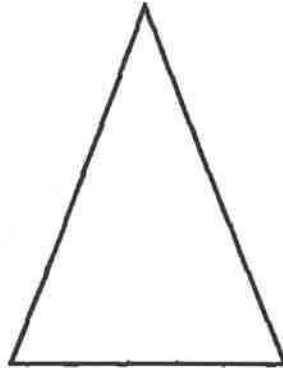
3 Identify the components at (a) and (b), below.



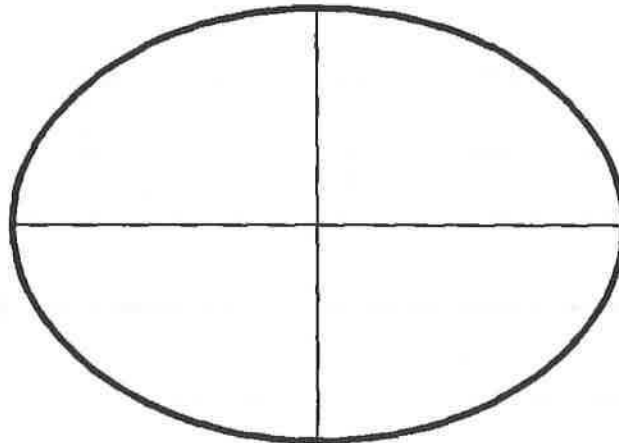
(a) _____

(b) _____

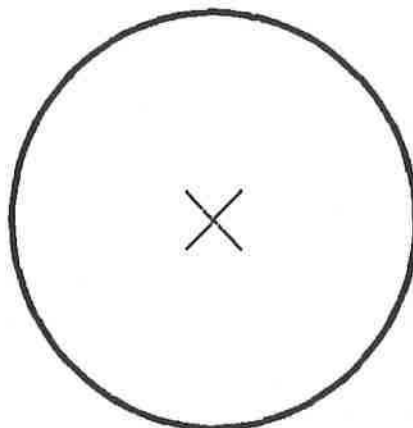
- 4 Convert the area of the given TRIANGLE to a RECTANGLE of equal area.



- 5 Given is an ELLIPSE. Locate the FOCAL POINTS.

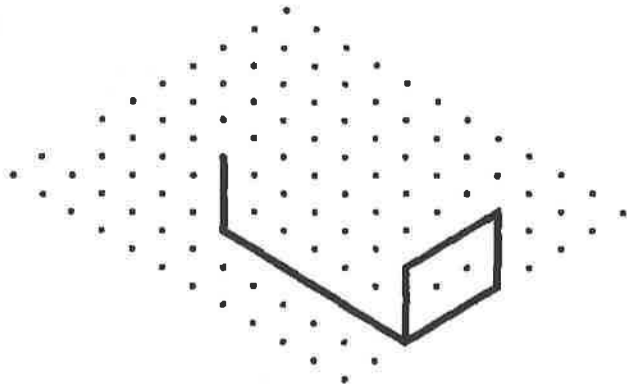
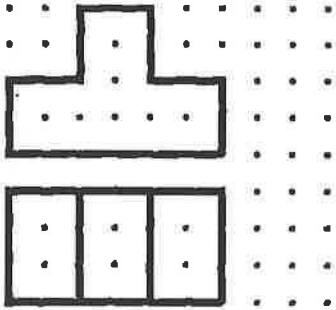


- 6 Inscribe a regular HEXAGON in the given CIRCLE.



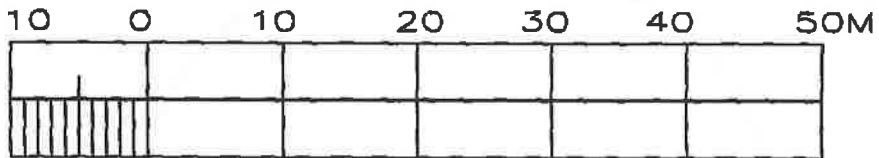
7

Shown is the elevation and plan of a solid. Complete the isometric view of the solid.



8

Using the scale provided, measure the lines AB and CD and state their lengths.



A _____ B

C _____ D

AB = _____

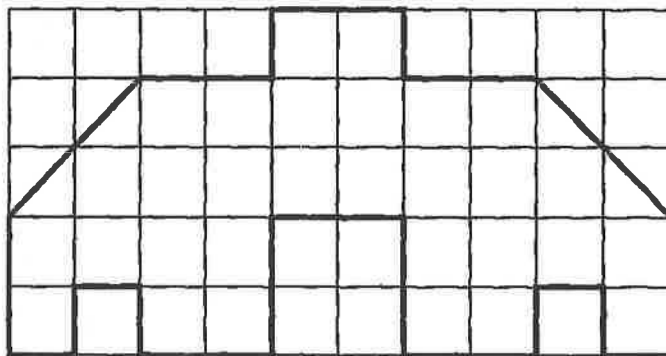
CD = _____

9

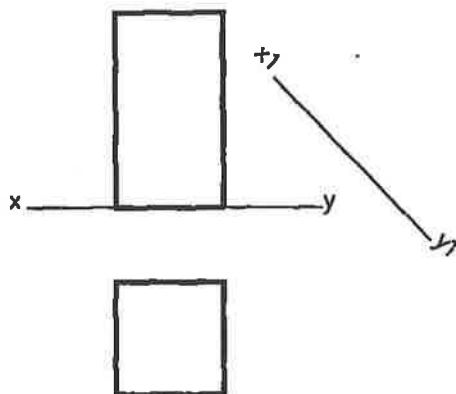
Determine the area of the irregular figure in square units.

1 square = 1 x 1 Unit.

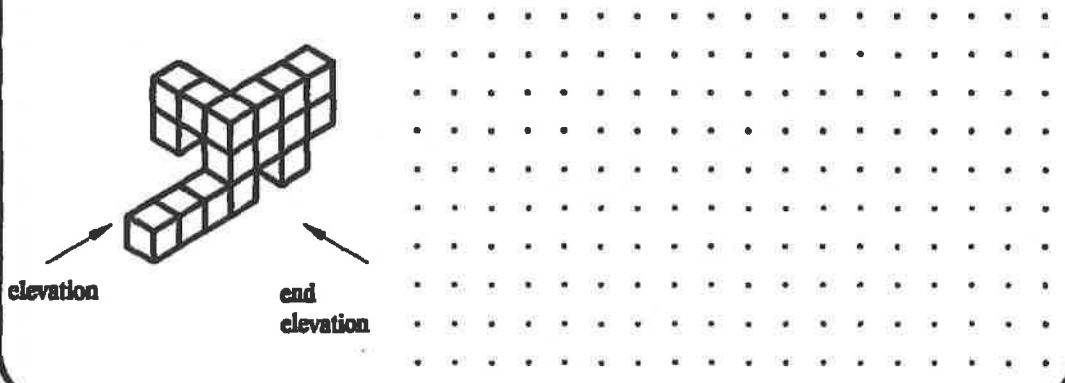
Ans :- _____



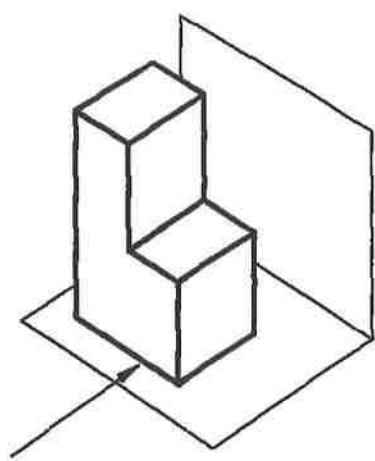
10 Shown is the elevation and plan of a square based prism.
Project the **AUXILIARY ELEVATION**, on the given **X1 - Y1** line.



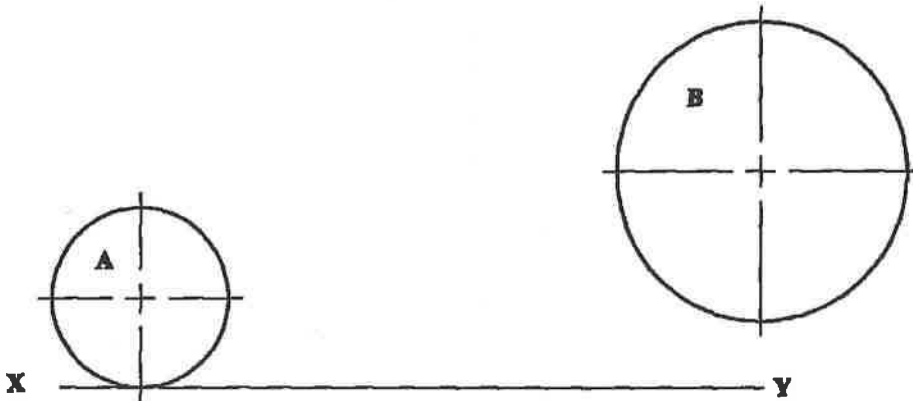
11 Using the grid provided, sketch the orthographic views indicated by the arrows.



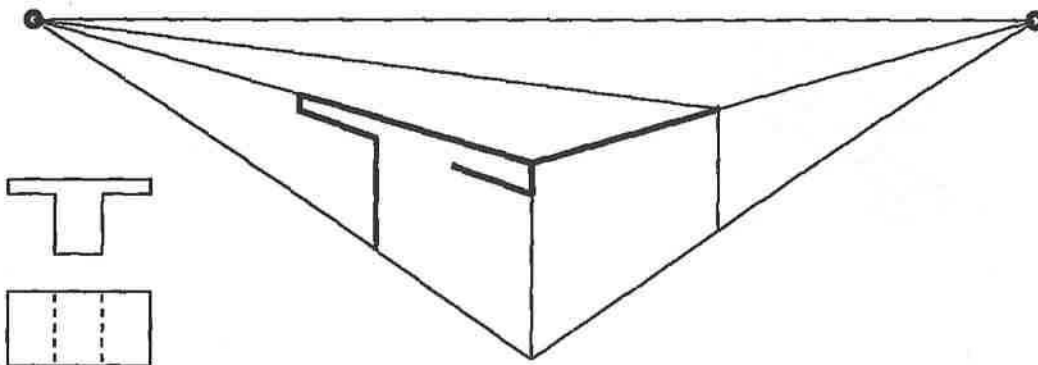
12 Sketch the **SHADOW** cast by the **SOLID** when the light source is as shown by the arrow.



- 13** Draw sphere B in contact with sphere A and with the Horizontal Plane, XY. Show all construction lines and points of contact.



- 14** The figure shows the TWO POINT perspective view of a solid. Complete the view.



- 15** Rotate the given figure, about point O, through 180° .

