



**A****JUNIOR CERTIFICATE EXAMINATION, 1994****TECHNICAL GRAPHICS - ORDINARY LEVEL****THURSDAY 16 JUNE - AFTERNOON, 2.00 - 4.30****TOTAL MARKS 400 (Sections A and B)**

<b>EXAMINATION NUMBER</b>		
<b>CENTRE STAMP</b>		<div style="border: 1px solid black; padding: 5px; display: inline-block;">IONAD</div>

**INSTRUCTIONS**

- (a) Answer any twelve 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 Answerbook (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**

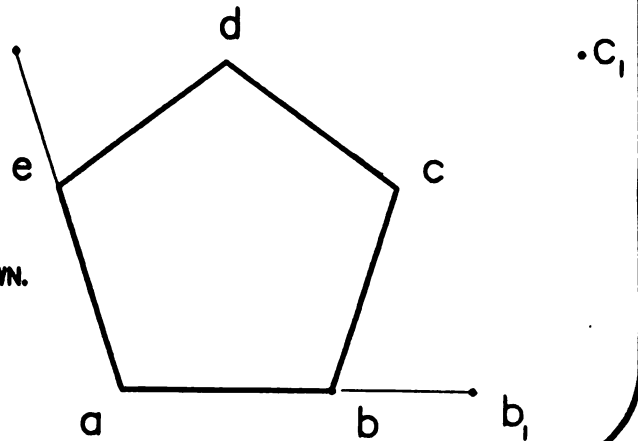
**THIS ANSWERBOOK MUST BE HANDED UP  
AT THE END OF THE EXAMINATION.**

**SECTION A ( ANSWER ANY TWELVE QUESTIONS – All questions carry equal marks )**

1

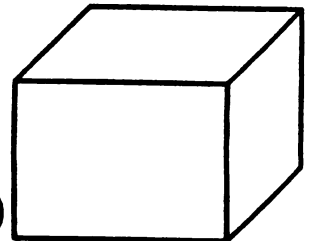
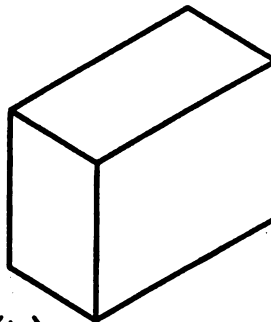
Complete the **ENLARGEMENT** of the regular PENTAGON a,b,c,d,e.

**NOTE :- ALL CONSTRUCTION LINES MUST BE CLEARLY SHOWN.**



2

IDENTIFY the three drawing systems (a), (b) and (c).



(a)

(b)

(c)

(a) \_\_\_\_\_

(b) \_\_\_\_\_

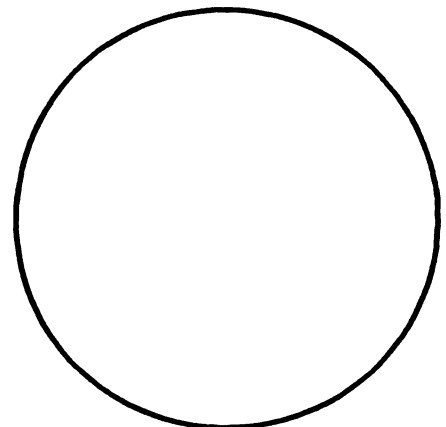
(c) \_\_\_\_\_

3

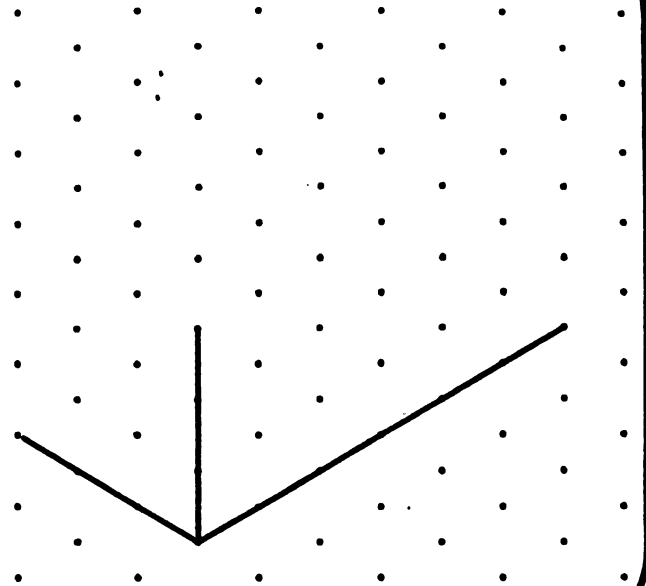
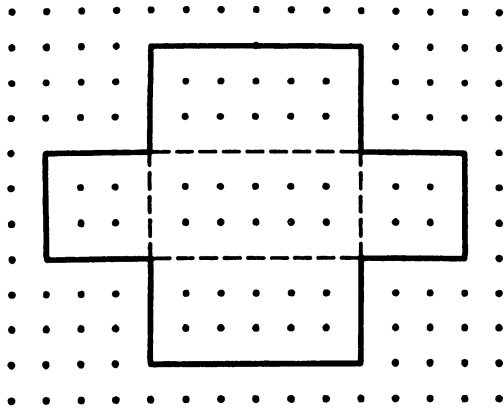
(a) Draw a **CHORD** on the given circle.

(b) Locate the **CENTRE** of the circle.

**NOTE :- ALL CONSTRUCTION LINES MUST BE CLEARLY SHOWN.**



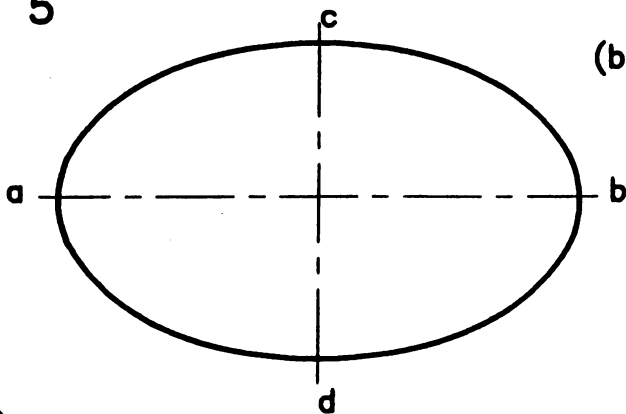
4



The DEVELOPMENT of an open container is shown above.

Draw an ISOMETRIC view of the assembled container.

5



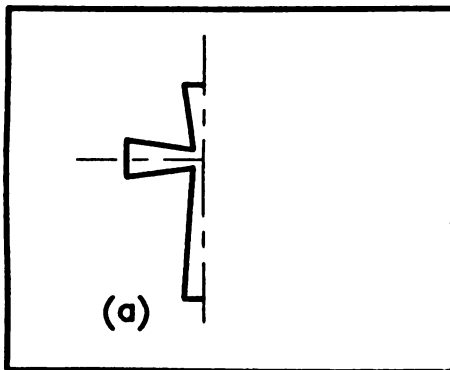
(a) Name the lines ab and cd.

(b) Show how to LOCATE the foci points.

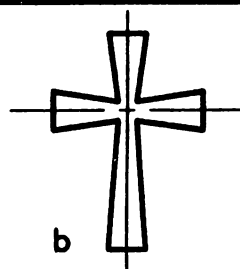
ab \_\_\_\_\_

cd \_\_\_\_\_

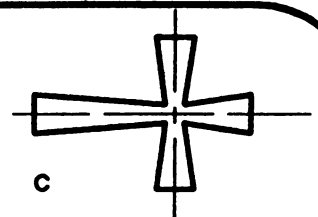
6



(a)



b



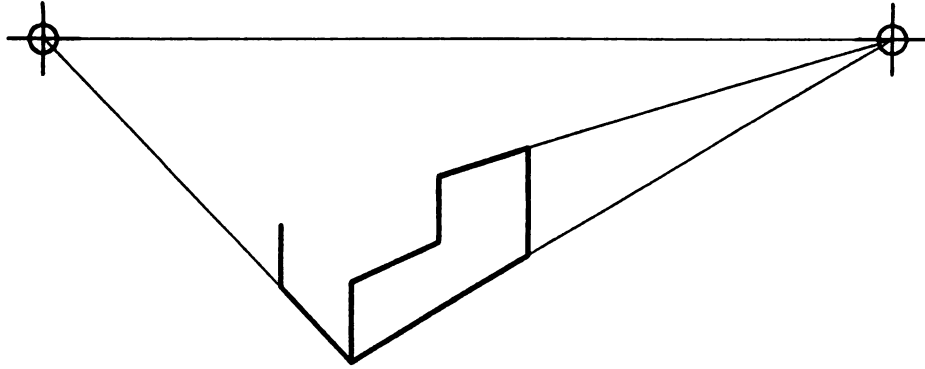
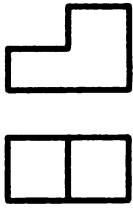
c

Name the CAD commands which are used to complete the design shown at (a) without further drawing.

(i) a to b \_\_\_\_\_

(ii) b to c \_\_\_\_\_

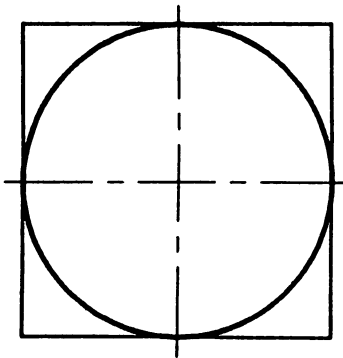
7



(a) Complete the PERSPECTIVE view shown.

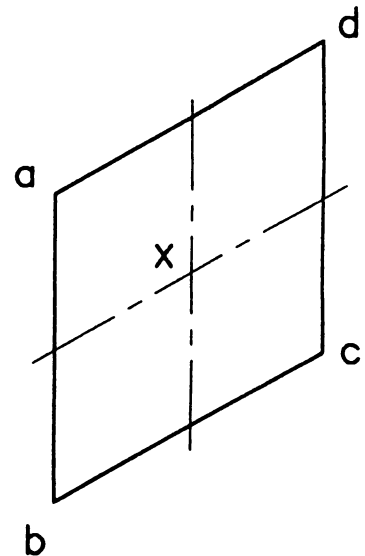
(b) Name the ringed points \_\_\_\_\_

8



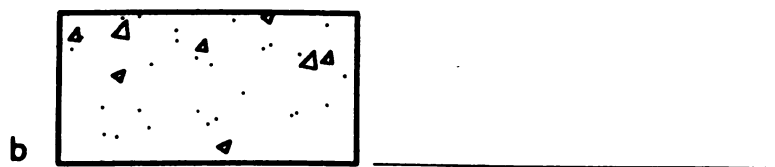
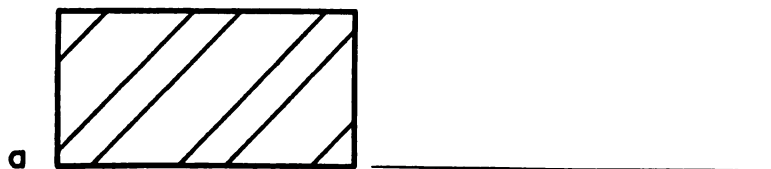
a,b,c,d is an ISOMETRIC view of a square.

Draw an ISOMETRIC view of one quadrant of the circle in the area marked X.

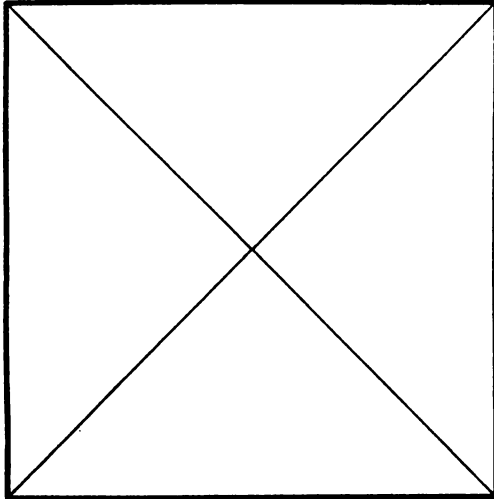


9

Name the MATERIALS of the symbols shown in box a and b.



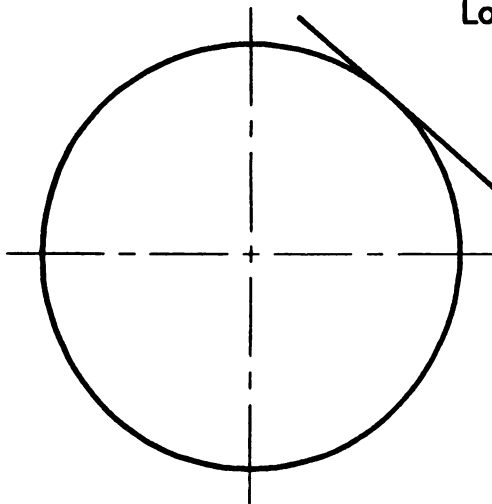
10



Inscribe an OCTAGON in the given square.

NOTE :- ALL CONSTRUCTION LINES MUST BE CLEARLY SHOWN.

11

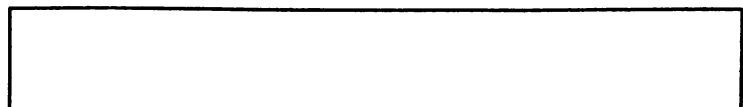


Locate the point of contact between the  
TANGENT and the CIRCLE.

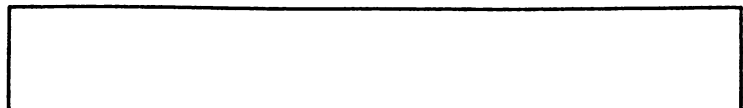
NOTE :- ALL CONSTRUCTION LINES MUST BE CLEARLY SHOWN.

12 Draw the following line types :-

(a) CENTRE LINE.

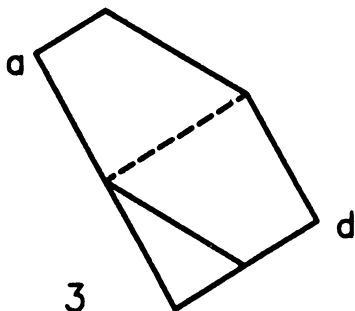
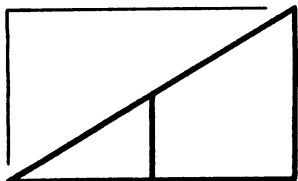


(b) HIDDEN DETAIL LINE.



13

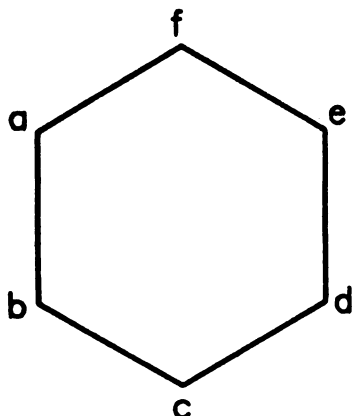
1



1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_



(a) Name the -views 1, 2 and 3.

(b) Index points a,b,c,d,e,f on all views.

14

Define the following terms in relation to a CIRCLE.

TANGENT :-

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SECTOR :-

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15

(a) Bisect the angle abc.

(b) INSCRIBE a circle of radius 20 millimetres.

to touch both arms of the angle.

NOTE :- ALL CONSTRUCTION LINES MUST BE CLEARLY SHOWN.

