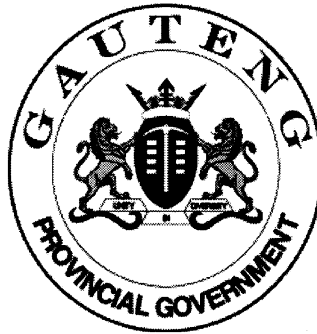


SENIOR CERTIFICATE EXAMINATION



**FEBRUARY / MARCH
2007**

METALWORK

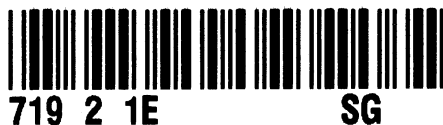
SG

First Paper

719-2/1 E

**METALWORK SG: Paper 1
Question Paper & Answer Book**

3 pages



719 2 1E

SG

X05



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GAUTENG DEPARTMENT OF EDUCATION
SENIOR CERTIFICATE EXAMINATION

METALWORK SG
(First Paper: Drawings)

TIME: 3 hours

MARKS: 100

INSTRUCTIONS:

- Answer ALL questions.
 - Answer the questions in Answer Book (719-2X) that is provided.
 - Write your examination number on your answer book.
 - Use your own judgement where dimensions and/or details have been omitted.
 - All projection and construction lines must be shown.
 - Marks will be deducted for poor presentation.
-
-

QUESTION 1

Answer this question on Answer Sheet 1.

- 1.1 **Figure 1.1** shows the front and top views of a sectioned cone in first- angle orthographic projection. Project and draw the sectioned left view in the space provided. (6)
- 1.2 **Figure 1.2** shows the profile of a metal casting. Using the centre lines in the space provided, draw the casting to a scale of 1:1. Show all constructions. (6)
- 1.3 **Figure 1.3** shows the front and top views of a machine part in first-angle orthographic projection. Using the two views, project a left view in the space provided. (4)
- 1.4 **Figure 1.4** shows four welding joints. Insert the correct welding symbols in the space provided. (4)
- [20]**

QUESTION 2

Answer this question on Answer Sheet 2.

The figure on Answer Sheet 2 shows the front and auxiliary views of a hexagonal prism with a round hole in first-angle orthographic projection. The solid prism is intersected by cutting plane **AA**.

Project a sectioned top view.

Do not show hidden details.

[20]

QUESTION 3

Answer this question on Answer Sheet 3.

The figure on Answer Sheet 3 shows the front and top views of a machine part in first-angle orthographic projection. Do not copy the views but draw to a scale of 1:1 an isometric view of the part. Make **A** the lowest part of the drawing as indicated on the Answer Sheet.

[20]

QUESTION 4

Answer this question on Answer Sheet 4.

The figure on Answer Sheet 4 shows the incomplete front view and top view of a cylinder being intersected by another cylinder and a hexagonal prism. Draw the following:

4.1 The lines of interpenetration in the front view (10)

4.2 The development of part A (Use the starting point provided.) (10)

[20]

QUESTION 5

Answer this question on Answer Sheet 5.

The figure shows the front and top views of a simple dwelling in first-angle orthographic projection. Produce to a scale of 1:1 a neat two-point perspective drawing of the dwelling.

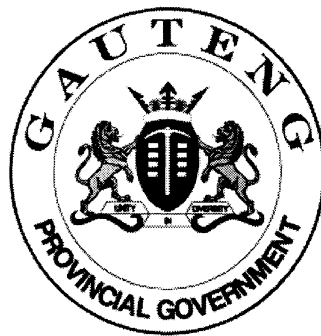
NB: Hidden details are not required.
Do not show wall thickness.

[20]

TOTAL: 100

END

**SENIOR CERTIFICATE
EXAMINATION
*SENIORSERTIFIKAAT-EKSAMEN***



**FEBRUARY / MARCH
*FEBRUARIE / MAART***

2007

**METALWORK
*METAALWERK***

**First Paper : Answer Book
*Eerste Vraestel : Antwoordboek***

SG

719-2/1 X

**METALWORK SG: Paper 1
Question Paper & Answer Book**

6 pages / bladsye



719 2 1E

SG

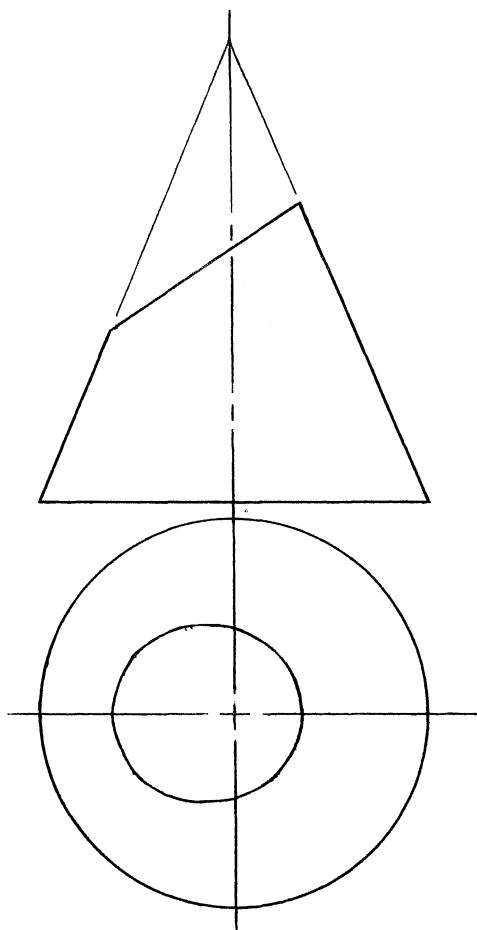
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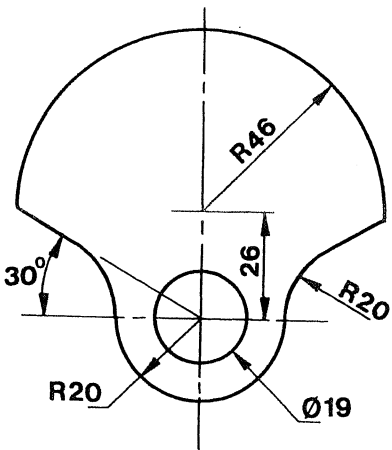


Fig 1.1



(6)

Fig. 1.2



(6)

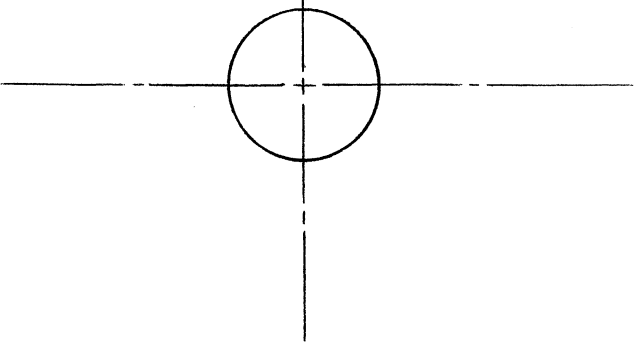
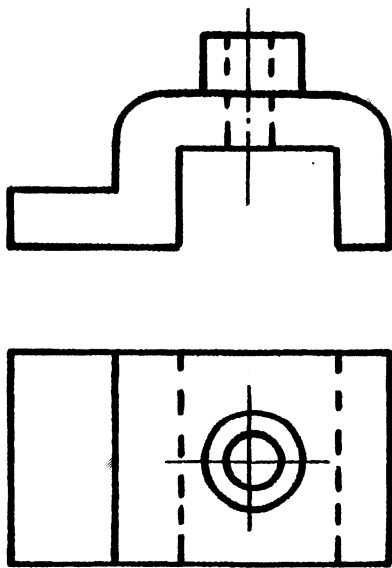


Fig. 1.3



(4)

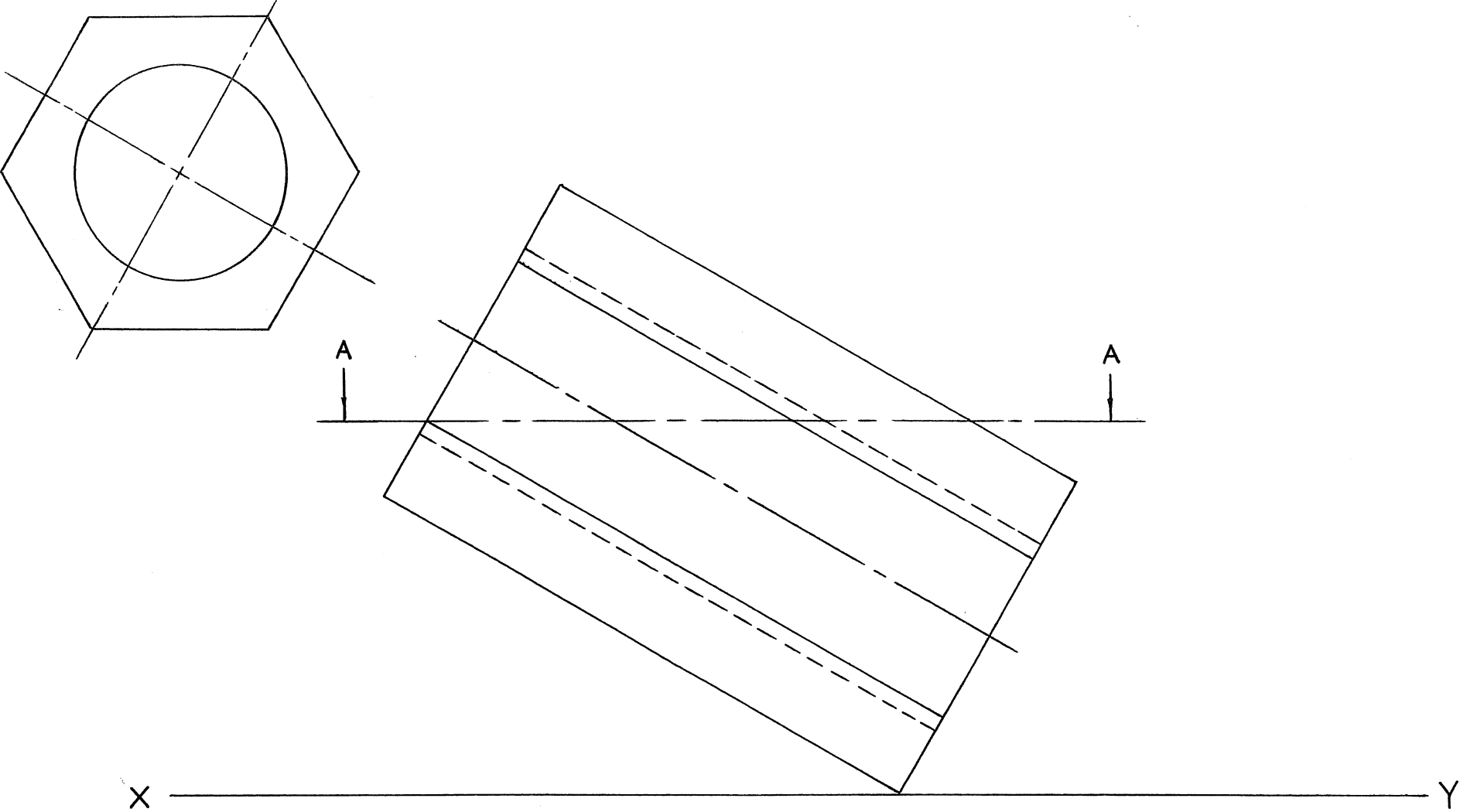
Fig. 1.4

WELD SWEIS	PICTURE PRENT	SYMBOL SIMBOOL
FILLET HOEKSWEISLAS		
SQUARE BUTT WELD HAAKSTUIKLAS		
SINGLE V BUTT WELD ENKEL V STUIKLAS		
DOUBLE U BUTT WELD DUBBEL U STUIKLAS		

(4)

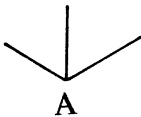
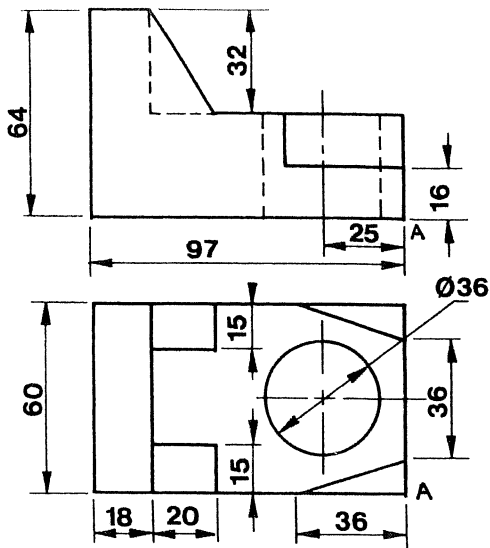
[20]

Fig. 2



Question Two	Marks	
Vraag Twee	Punte	
Correctness		
Korrektheid	16	
linework/Neatness		
lynwerk/Netheid	2	
Accuracy		
Akuraatheid	2	
Total/Totaal	20	

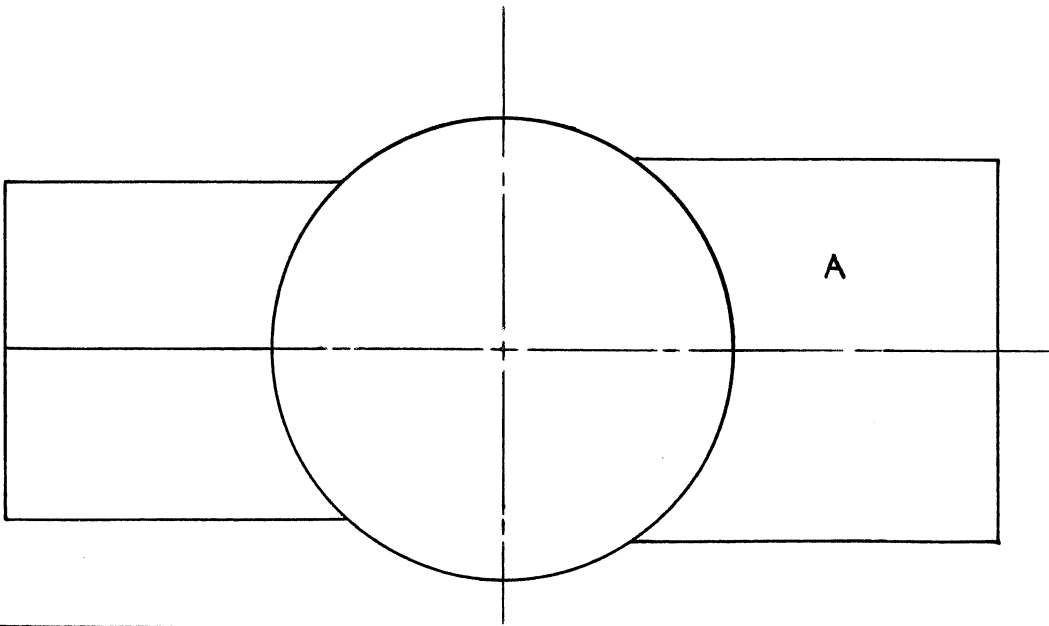
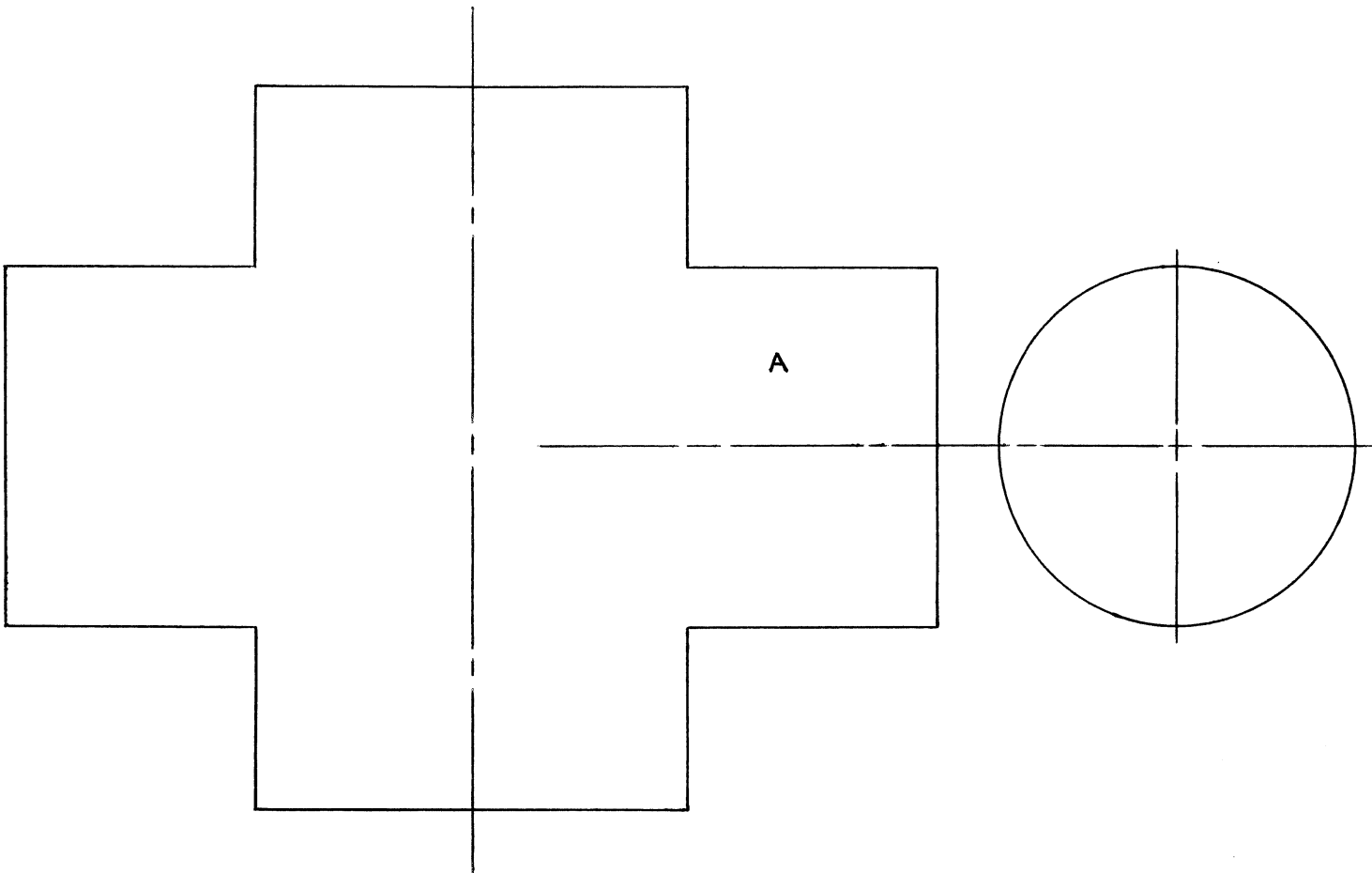
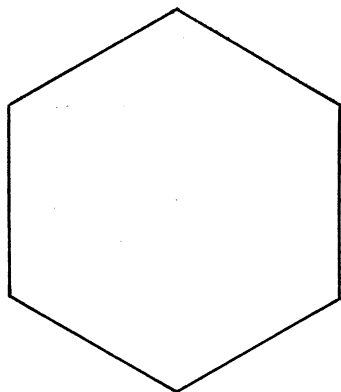
Fig. 3



Question Three Vraag Drie	Marks Punte	
Correctness Korrektheid	12	
Insight/Insig	2	
Circles/Sirkels	4	
linework/Neatness lynwerk/Netheid	2	
Total/Totaal	20	

Examination no. _____
Eksamennr. _____

Fig. 4



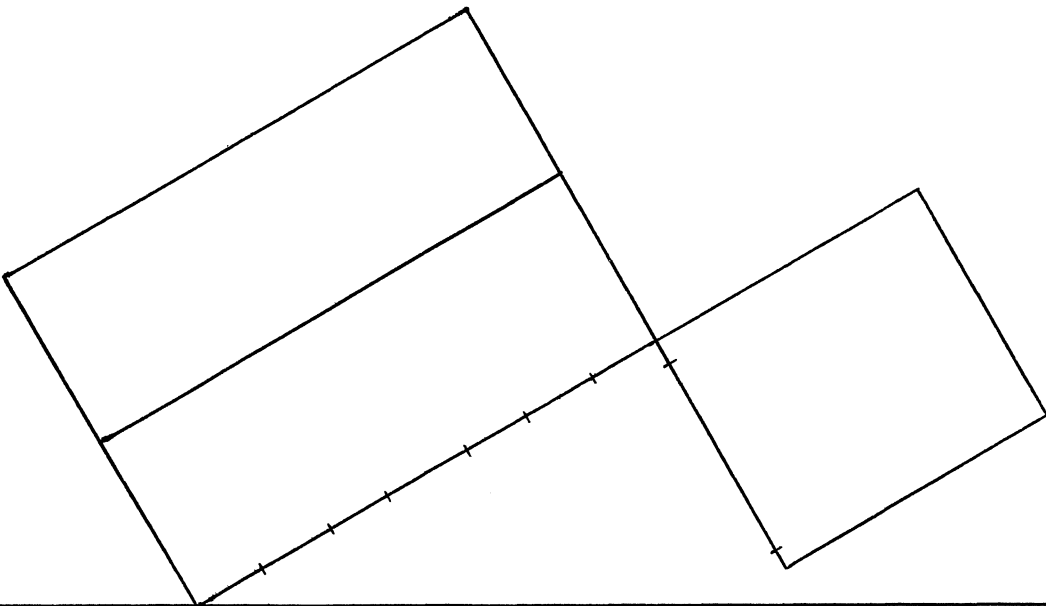
Question Four Vraag Vier	Marks Punte	
Interpenetration curve /Deurdringskromme	9	
Auxillary View/ Hulpaansig	—	
Development of A Ontwikkeling van A	9	
Accuracy Akuraatheid	2	
Total/Totaal	20	

Examination no. _____
Eksamennr. _____

Answer Sheet 4
Antwoordvel 4

Question 4
Vraag 4

Fig. 5



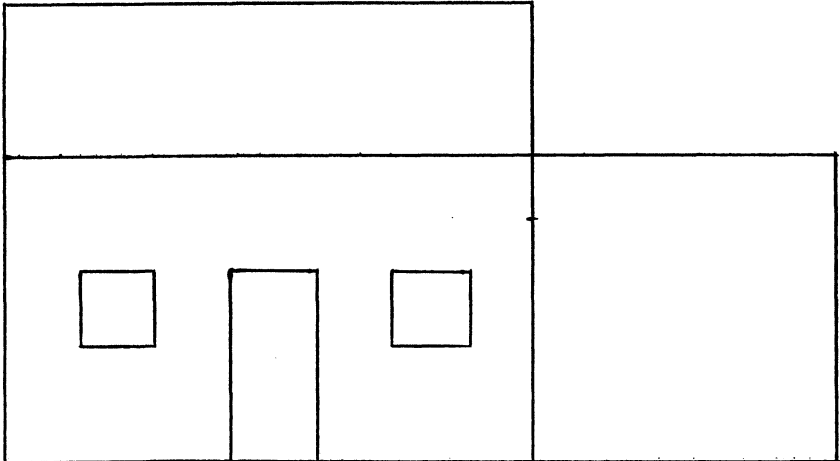
PP

HL

Question Five Vraag Vyf	Marks Punte	
Vanishing Points Verdwynpunte	4	
Insight/Insig	2	
Correctness Korrektheid	12	
Linework/Lynwerk Neatness/Netheid	2	
Total/Totaal	20	

GL

SP



Examination no. _____
Eksamennr. _____

Answer Sheet 5
Antwoordvel 5

Question 5
Vraag 5