



EKSAMINATOR/ EXAMINER: F. MARX  
MODERATOR: J. NAUDE

GR 10

INGENIEURSGRAFIKA EN –ONTWERP V2  
ENGINEERING GRAPHICS AND DESIGN P2

Totaal/ Total: 120  
Tyd/ Time: 2 ure/hrs

**INSTRUKSIES EN INLIGTING**

- Beantwoord ALLE vrae.
- Alle tekene moet volgens skaal 1:1 gemaak word, tensy anders vermeld.
- Alle vrae moet op die gegewe antwoordvulle beantwoord word.
- Alle antwoordvulle moet weer in nommervolgorde vasgekrum en ingelewer word, ongeag of die vraag beantwoord is of nie.
- Sorgvuldige tydsbeplanning is nodig om alle vrae te beantwoord.
- Drukskrif/ jou naam in die blokkie voorsien op elke antwoordvel.
- Alle antwoorde moet akkuraat en netjies gedoen word.
- Besonderhede of afmetings wat uitgelaat is moet in goeie verhouding beraam word.

**INSTRUCTIONS AND INFORMATION**

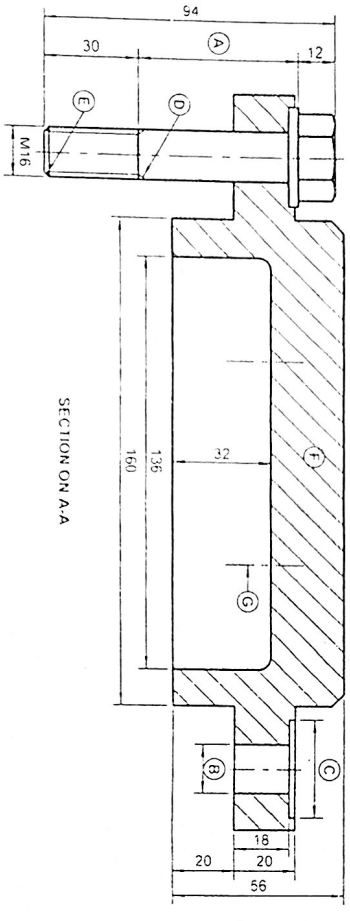
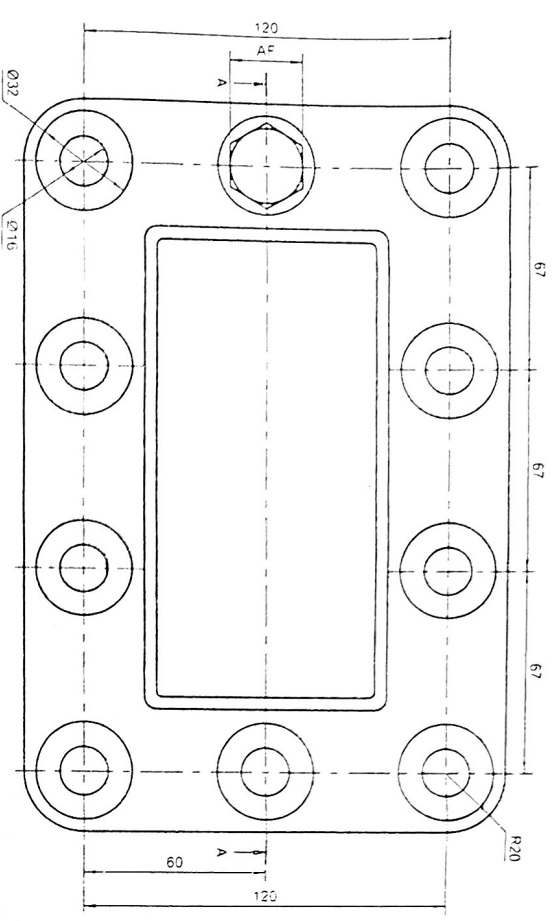
- Answer ALL the questions.
- All drawings must be drawn to scale 1:1, unless otherwise stated.
- The questions must be answered on the answer sheets provided.
- All the answer sheets must be re-stapled in numerical sequence and handed in irrespective of whether the question was attempted or not.
- Careful time management is essential in order to complete all the questions.
- Print your name in the block provided on every answer sheet.
- All answers must be drawn accurately and neatly.
- Any details or dimensions not given must be assumed in good proportion.

Punt/Mark	
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<b>VOLTOOI / COMPLETE</b>	
NAAM	
NAME	
DATUM	
DATE	

**Question 1 - Mechanical analytical**

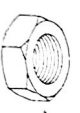
Given:  
Two views of a MOUNTING PLATE, a title block and a table of questions  
Instructions:  
Complete the table below by answering the questions, which all refer to the accompanying drawing



QUESTIONS	ANSWERS			
1. Who checked the drawing?		1		
2. On what date was the drawing approved?		1		
3. What is the drawing number?		1		
4. What CAD drawing system was used?		1		
5. Which material is the mounting plate made of?		1		
6. Which orthographic projection system has been used?		1		
7. How many M-16 bolts must be used to secure the mounting plate?		1		
8. Determine the dimensions at:	A	B	C	3
9. Determine the angle size at:	D	E		2
10. Label the features at:	F	G		2
11. How many times has the drawing been revised?				1
12. What scale is indicated for the drawing?				1
13. In the box below, draw, in neat freehand, the symbol for the projection system used.				4
<b>TOTAL</b>				<b>20</b>

DATE	04/12/14	CHANGED BY	GERT	CHANGE MACHINING SPEC.	2
	01/12/14		ANDRE	HATCHING DETAIL	1
DATE		CHANGED BY		DESCRIPTION OF REVISION	N.
<b>MOUNTING PLATE</b>					
DRAWING No. Jfagd - Am/12					
FILE NAME AM 2.2014					
DRAWN ANEMIE			07/12/14		
CHECKED HENDRIK			10/12/14		
APPROVED JOHAN			13/12/14		
SCALE 1 : 2			SYMBOL		

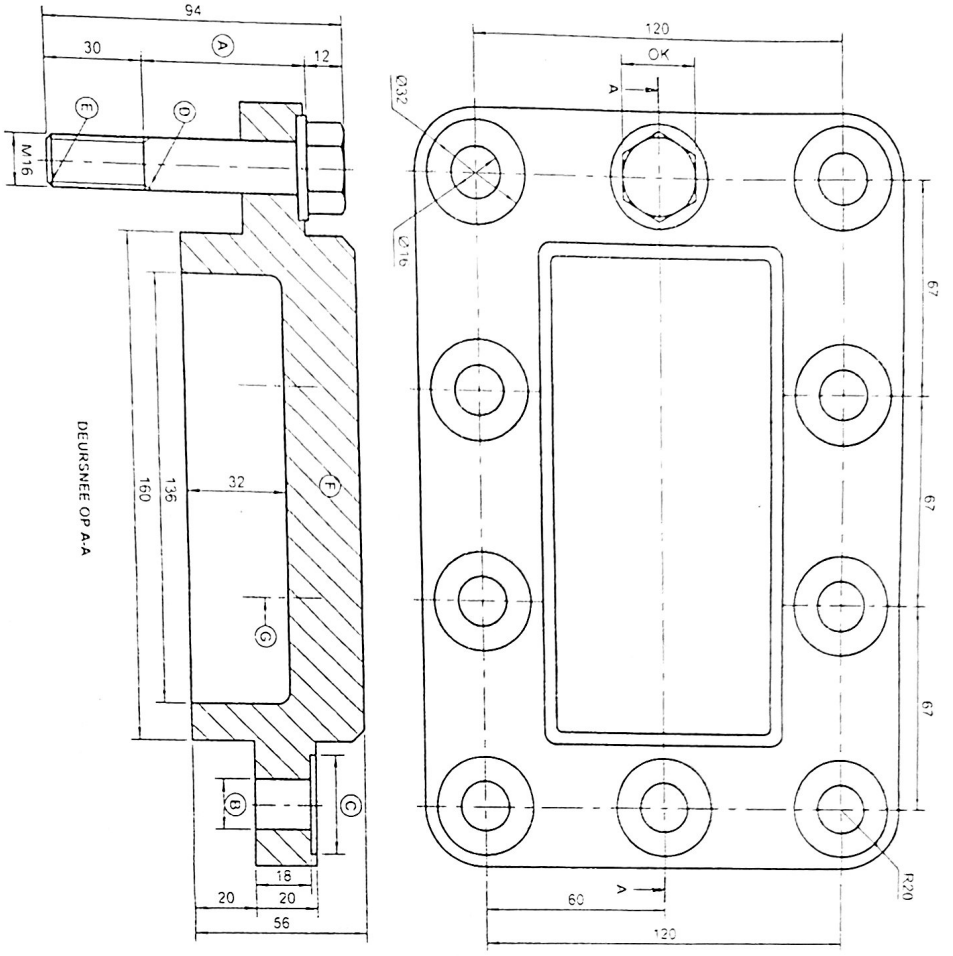
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**Vraag 1 - Meganies analities**

Geges: Twee aansigte van 'n MONTEERPLAAT met 'n tielblok en 'n tabel met vrae.

Instrukties: Voltoon die tabel hieronder deur die vrae, wat almal na die bygaande tekening en tielblok verwys, nelyks te beantwoord



VRAE	ANTWOORDE	
1. Wie het die tekening nagegaan?		1
2. Op watter datum is die tekening goedgekeur?		1
3. Wat is die tekening nommer?		1
4. Watter ROT stelsel is gebruik om die tekening te produseer?		1
5. Van watter materiaal moet die monterplaat vervaardig word?		1
6. Watter ortografiese projeksietegniek is vir die tekening gebruik?		1
7. Hoeveel M-16 boute word benodig om die monterplaat te bevestig?		3
8. Bepaal die afmetings by	A B C	
9. Bepaal die hoekgroottes by	D E G	
10. Benoem die kenmerke by	F	
11. Hoeveel keer is die tekening hersien?		1
12. Wat is die skaal wat vir die tekening aangetoon word?		1
13. Teken, in die blok hieronder, 'n reëliese vryhand, die simbool vir die projeksietegniek wat gebruik is		4
<b>TOTAAL</b>		<b>20</b>

04/12/14	GERT	VERANDER MASJINERING SPES.	2
01/12/14	ANDRE	ASSERINGERBESONDERHEDE	1
DATAUM	VERANDER DEUR	BEKRYWING VAN HERSIENING	Nr.

<b>MONTEERPLAAT</b>	
MATERIAAL: GIETYSER	
TEKENPROGRAM: TurboCAD Pro v18	
TEKENING Nr. J-Pegid - AM / 2	
LÊERNAMM: AM 2 2014	

TEKENAAR: ANEMIE	07/12/14	SIMBOOL
NASIENER: HENDRIK	10/12/14	
GOEDGEKEUR: JOHAN	13/12/14	

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SKAAL: 1:2

### Question 2- Isometric drawing

Given:

- The front and top view of a SUPPORT BASE
- The position of A on the drawing sheet

Instructions:

Using scale 1 : 1, convert the orthographic views of the support base into an isometric drawing.

- Make A the lowest point of the drawing.
- NO hidden detail is required.

Total: 40

### Vraag 2- Isometriese tekening

Gegee:

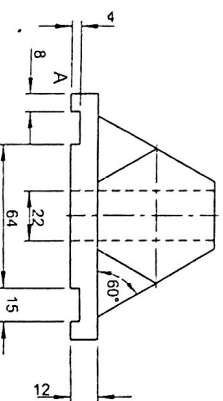
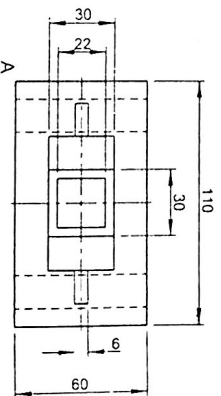
- Die vooransig en boansig van 'n VOETSTUK.
- Die posisie van A op die tekenvel.

Instrukties:

Gebruik skaal 1 : 1 en omskep die ortografiese aansigte van die voetstuk in 'n isometriese tekening.

- Maak A die laagste punt van die tekening.
- Geen verborge besonderhede word verlang nie.

Totaal: 45



**Question 3 - Orthographic**

**Given:**

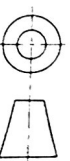
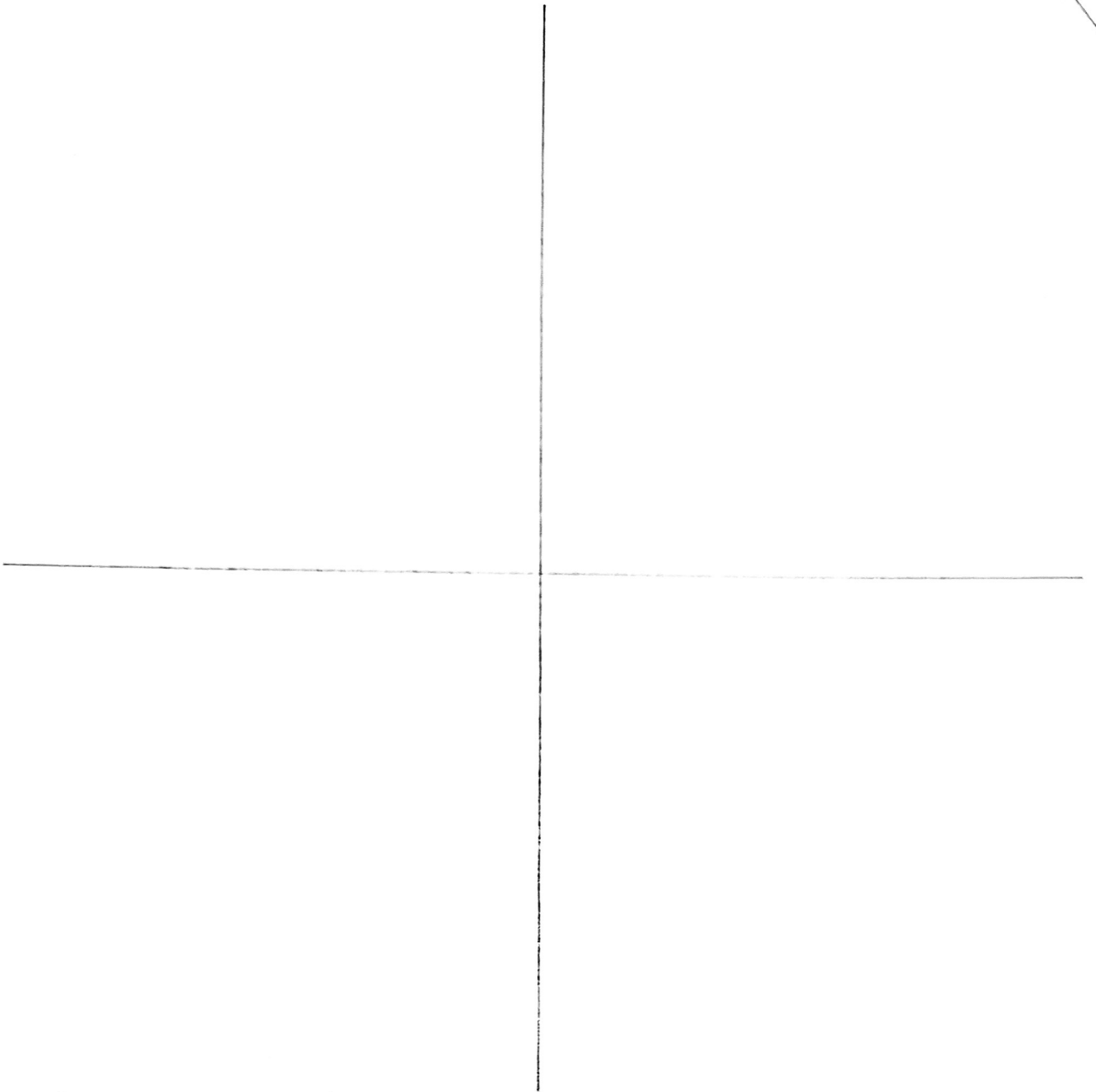
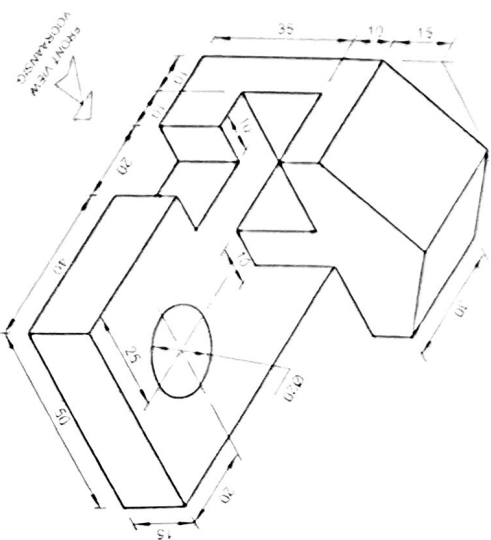
- Isometric drawing of a MODEL.
- X, Y AXES

**Instructions:**

Use third angle orthographic projection and complete the following according to scale 1:1

- A Front view (14)
- A top view ( No hidden detail required) (15)
- A Right view (14)
- Print the title and scale (2)
- Insert 5 dimensions (5)

Total 50



### Vraag 3- Ortografies

Gegee:

- Isometriese tekening van 'n MODEL.
- X-Y AS.

Instrukties:

Gebruik derdehoekse-ortografiese projeksie en voltooi die volgende volgens skaal 1:1 :

- n Vooransig. (14)
- 'n Boansig ( Geen verborge besonderhede) (15)
- 'n Regteransig (14)
- Drukskrif die titel en skaal. (2)
- Voeg 5 afmetings by. (5)

Totaal: 50

