



**ISEBE LEMFUNDO LEMPUMA KOLONI
EASTERN CAPE EDUCATION DEPARTMENT
OOS-KAAP ONDERWYSDEPARTEMENT**

**NATIONAL SENIOR CERTIFICATE
NASIONALE SENIOR SERTIFIKAAT**

GRADE 11

GRAAD 11

**ENGINEERING GRAPHICS AND DESIGN P2
INGENIEURSGRAFIKA EN -ONTWERP V2**

NOVEMBER 2019

**MARKING GUIDE
NASIENRIGLYN**

PUNTE: 200

MARKS: 200

TYD: 3 uur

TIME: 3 hours

Die nasienriglyn bestaan uit 7 bladsye.

This marking guide consists of 7 pages.

Kopiereg voorbehou

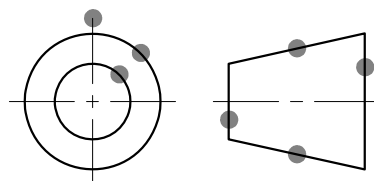
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ANSWERS		
1	2019/04/25	1
2	DERICK	1
3	JIG MAKER	1
4	1:5	1
5	9500	1
6	21/03/2019	1
7	bracket13.dwg	1
8	FRONT VIEW	1
9	1.2 mm	2
10	6	1
11	REMOVED SECTION	2
12	WEB / RIB	1
13	EMBOSS	1
14	FILLET	1
15	$10 + 30 + 15 + 26 = 81$	2
16	A - $\varnothing 28$ B - 41 C - 25 D - 52°	4
17	$\varnothing 46$	2
18		4
	TOTAL	28

ANTWOORDE		
1	2019/04/25	1
2	DERICK	1
3	JIG MAKER	1
4	1:5	1
5	9500	1
6	21/03/2019	1
7	stut13.dwg	1
8	VOORAANSIG	1
9	1.2 mm	2
10	6	1
11	VERWYDERDE SNIT / WEGSTAAN	2
12	WEB / RIB	1
13	BOSSELEER	1
14	FILLET / BINNE RONDING	1
15	$10 + 30 + 15 + 26 = 81$	2
16	A - $\varnothing 28$ B - 41 C - 25 D - 52°	4
17	$\varnothing 46$	2
18		4
	TOTAAL	28

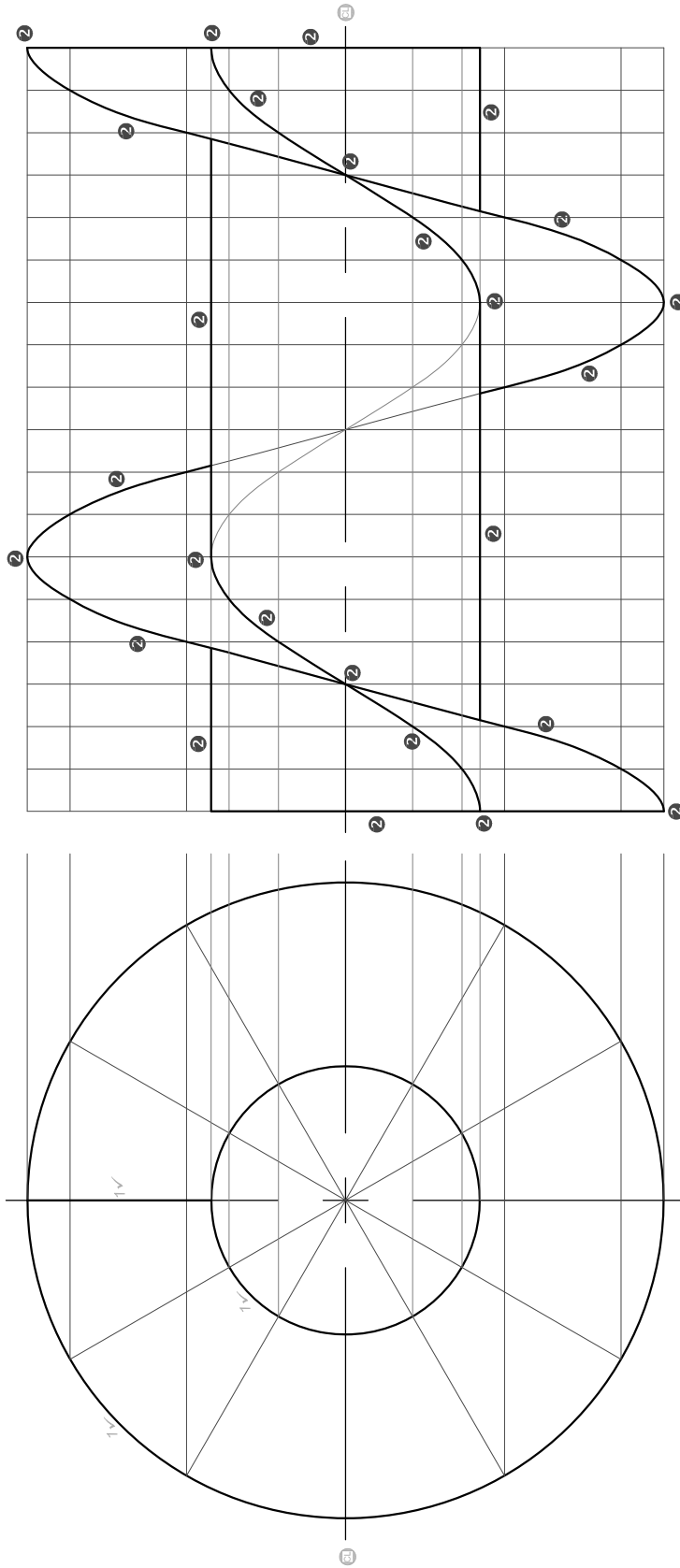
ANSWER 18 / ANTWOORD 18

● FREEHAND / VRYHAND



(4)

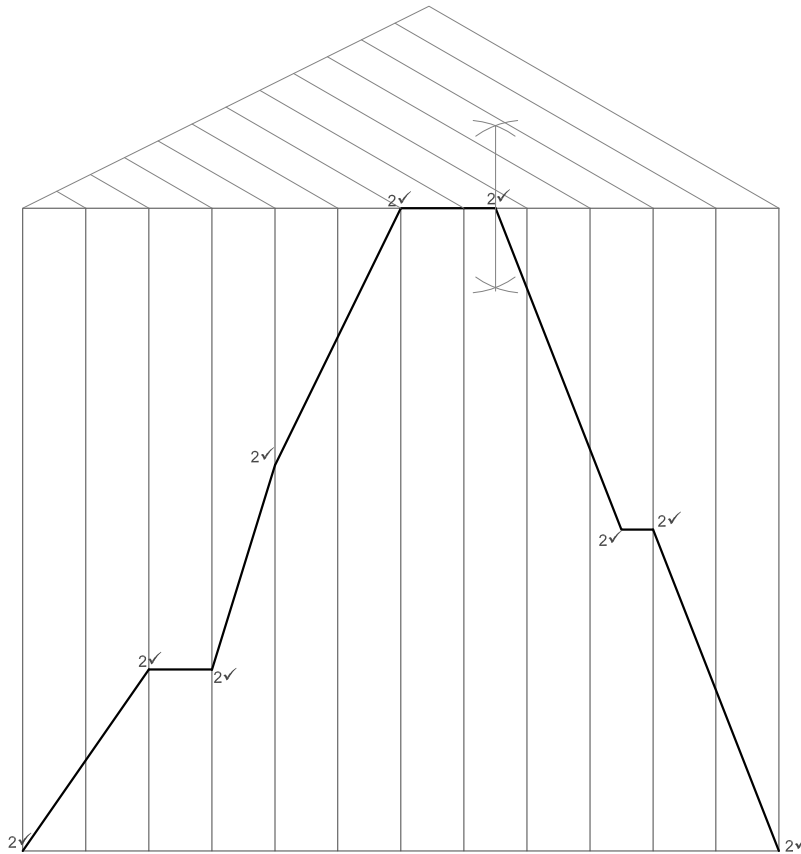
QUESTION 1 / VRAAG 1
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- 1. KONSTRUKSIE**
- Sirkel verdeel in 12 dele (linkeraansig) 1
 - Horizontale projeksie 1
 - Steek = 72 mm 1
 - Steek verdeel in 12 dele 1
 - Vertikale projeksie 1
 - Totale afstand = 108 mm (18 dele) 1
 - Rigting = Links 1½
- 1. KONSTRUKTION**
- Circle divided 12 parts (left view) 1
 - Horizontal projection 1
 - Pitch = 72 mm 1
 - Pitch divided 12 parts 1
 - Vertical projection 1
 - Total length = 108 mm (18 parts) 1
 - Direction = Left 1½

QUESTION 2.1 / VRAAG 2.1
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ASSESSERINGSKRITERIA		ASSESSMENT CRITERIA	
1	LINKERAANSIG + KONSTR'	12	1
2	AWEGAAR + AS	13	2
SUBTOTAAL		25	SUBTOTAL
		12	12
		13	13
		25	



VERPLASINGSGRAFIEK 2✓
 SKAAL: 360° = 100 mm 2✓

DISPLACEMENT GRAPH
 SCALE: 360° = 100 mm

1. KONSTRUKSIE

- Rotasie = 100 mm 1
- Verdeel in 12 gelyke dele 1
- Konstruksie getoon vir 12 dele 1/3

1. CONSTRUCTION

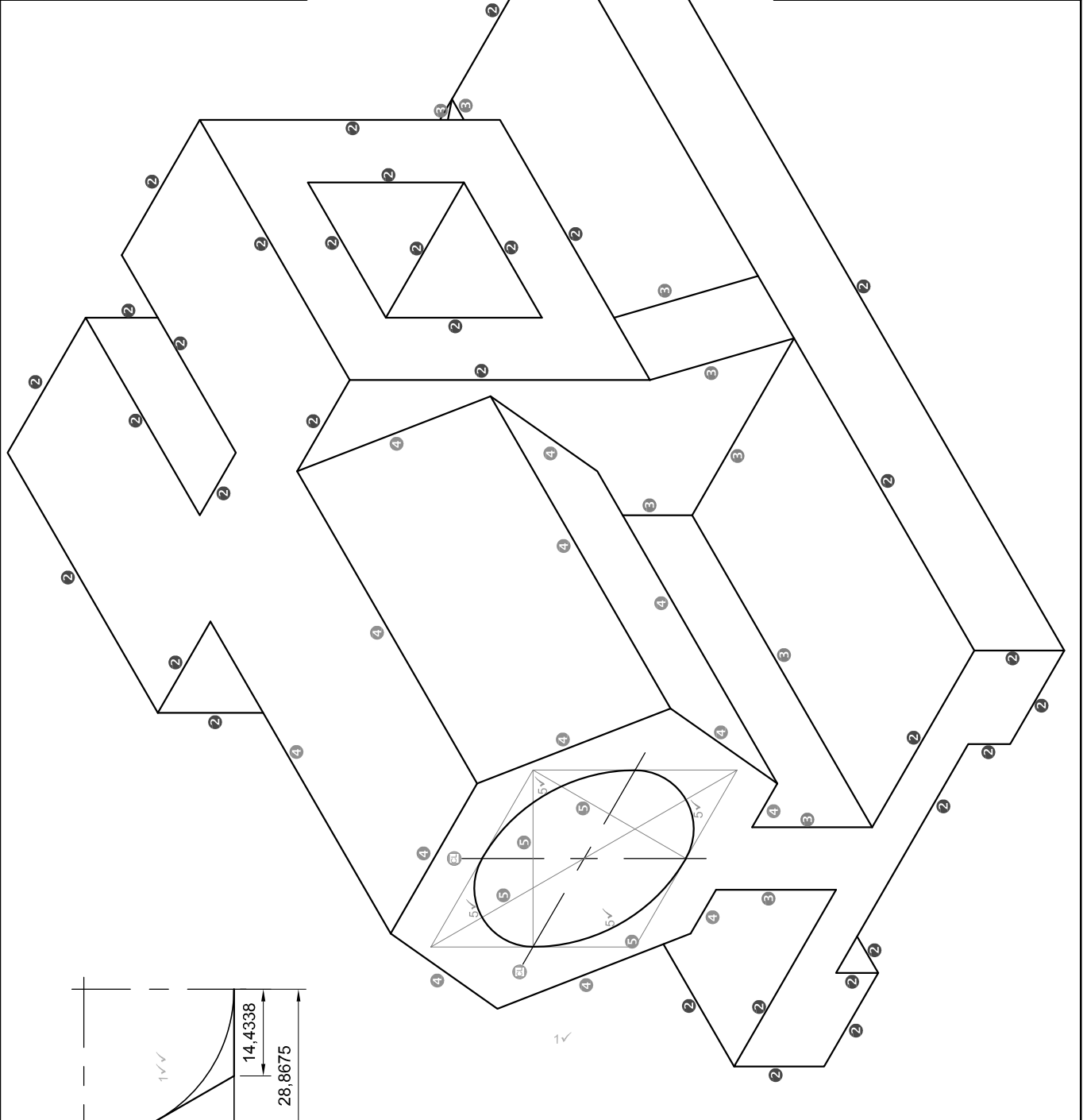
- Rotation = 100 mm 1
- Divided into 12 equal parts 1
- Construction shown for 12 parts 1/3

QUESTION 2.2 / VRAAG 2.2
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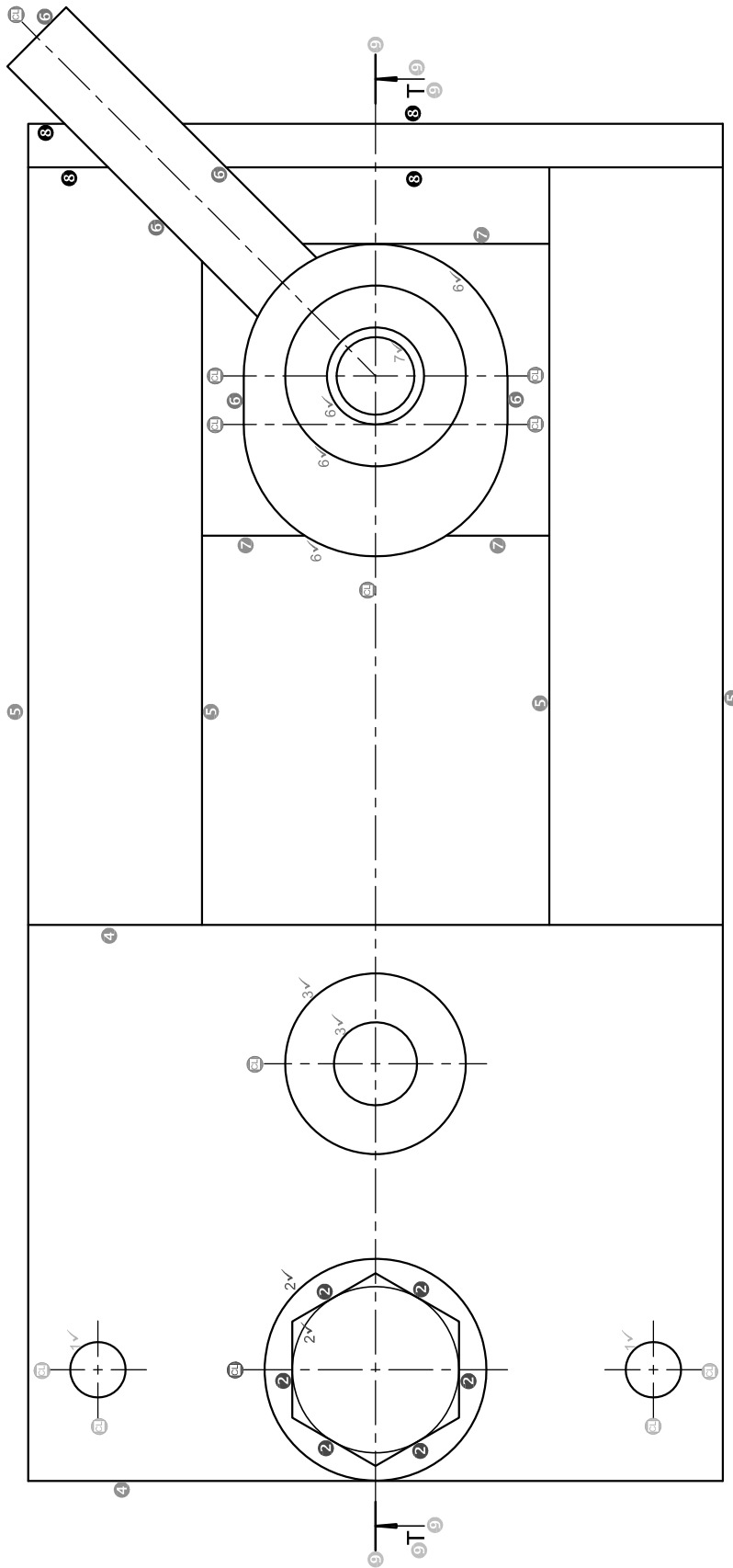
ASSESSERINGSKRITERIA			ASSESSMENT CRITERIA		
1	KONSTRUKSIE	3	1	CONSTRUCTION	3
2	GRAFIEK + TITEL	11	2	GRAPH + LABEL	11
SUBTOTAAL 2.2		14	SUBTOTAL 2.2		14

ASSESSERINGSKRITERIA	
1	KONSTR' + PLASING
2	ISOMETRIESE LYNE
3	RIB
4	SESKANT
5	SIRKEL
TOTAAL	
	38

ASSESSMENT CRITERIA	
1	CONSTR' + PLACEMENT
2	ISOMETRIC LINES
3	RIB
4	HEXAGON
5	CIRCLE
TOTAL	
	38



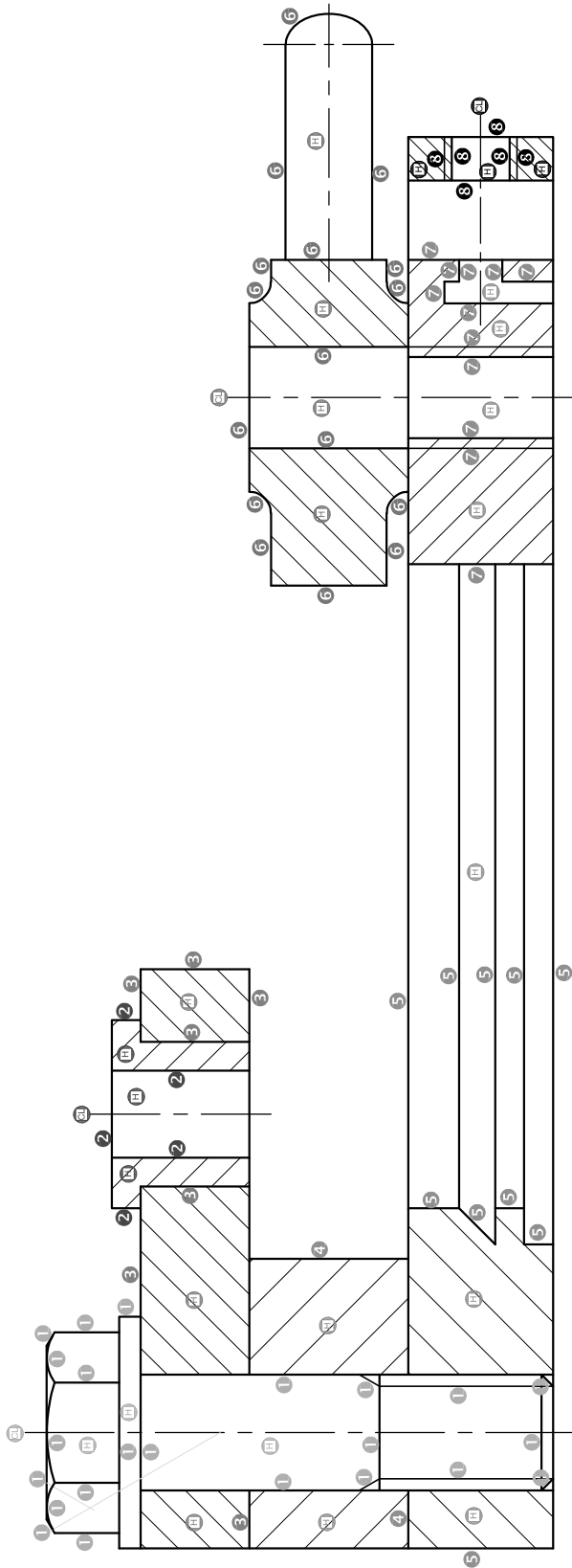
QUESTION 3 / VRAAG 3
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ASSESSMENT CRITERIA									
TOP VIEW									
1	PIN	4	6	CAM LEVER	9 1/2				
2	M16 BOLT + WASHER	5 1/2	7	SLIDE BLOCK	2 1/2				
3	GUIDE BUSH	2 1/2	8	COVER PLATE	2				
4	TOP PLATE	1	9	CUTTING PLANE T-T	3				
5	BASE	2		SUBTOTAL	32				

ASSESSERINGS- KRITERIA									
BOAANSIG									
1	PEN	4	6	NOKHANDVATSEL	9 1/2				
2	M16-BOUT + WASTER	5 1/2	7	GLYBLOK	2 1/2				
3	GIDSBUS	2 1/2	8	DEKPLAAT	2				
4	BO-PLAAT	1	9	SNYVLAK T-T	3				
5	BASIS	2		SUBTOTAAL	32				

QUESTION 4 / VRAAG 4
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ASSESSERINGSKRITERIA					
DEURSNEE VOORAANSIG					
1	M16-BOUW + WASTER	13½	6	NOKHANDVATSEL	10½
2	GIDSBUS	4½	7	GLYBLOK	8
3	BO-PLAAT	5	8	DEKPLAAT	5
4	GIDSBLOK	2	9	SAMESTELLING	8
5	BASIS	6½	SUBTOTAAL		63

ASSESSERINGSKRITERIA					
SECTIONAL FRONT VIEW					
1	M16 BOLT + WASHER	13½	6	CAM LEVER	10½
2	GUIDE BUSH	4½	7	SLIDE BLOCK	8
3	TOP PLATE	5	8	COVER PLATE	5
4	GUIDE BLOCK	2	9	ASSEMBLY	8
5	BASE	6½	SUBTOTAL		63

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