

VRAAG 1: PAPIERGEWIG - DERDEHOEKS ORTOGRAFIES
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AKKURAATHEID (Met masker)

VOORAANSIG	<ul style="list-style-type: none"> ○ 4 vlakke: 2 elk (hoogte 1 + lengte 1) ○ Maksimum van 1 mm toleransie 	8
BO-AANSIG	<ul style="list-style-type: none"> ○ 4 vlakke: 2 elk (hoogte 1 + lengte 1) ○ Maksimum van 1 mm toleransie 	8
LINKERAANSIG	<ul style="list-style-type: none"> ○ 5 vlakke: 2 elk (hoogte 1 + lengte 1) ○ Maksimum van 1 mm toleransie 	10
<p>Nota: Indien die tekening in eerstehoekse ortografiese projeksie geteken is, sal slegs die vooraansig nagesien word.</p>		
AGTHOEK	<ul style="list-style-type: none"> ○ 8 sye: 1 punt elk 	8
SESHOEK HEXAGON	<ul style="list-style-type: none"> ○ 6 sye: 1 punt elk 	6

ALGEMEEN (Sonder masker)

AFMETINGS	<ul style="list-style-type: none"> ○ 3 afmetings: 2 elk, bereken soos volg: <ul style="list-style-type: none"> - Verlengingslyn (1) - Maatlyn (1) - Pylpunt (1) - Afmetingskrywe (1) - Deursnee-simbool by sirkel (1) $(4 \div 2) = 2$ 	6
SIMBOOL	<ul style="list-style-type: none"> ○ 3 punte, bereken soos volg: <ul style="list-style-type: none"> - Vooraansig ($\frac{1}{2}$) - Linkeraansig ($\frac{1}{2}$) - Middellyne (1) 	2

TOTAAL:	48 ÷ 2
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Benader tot heelgetal:	24
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**QUESTION 1: PAPERWEIGHT - THIRD ANGLE
ORTHOGRAPHIC**

ACCURACY (With mask)

FRONT VIEW	<ul style="list-style-type: none"> ○ 4 planes: 2 each (height 1 + length 1) ○ Maximum of 1 mm tolerance 	8
TOP VIEW	<ul style="list-style-type: none"> ○ 4 planes: 2 each (height 1 + length 1) ○ Maximum of 1 mm tolerance 	8
LEFT VIEW	<ul style="list-style-type: none"> ○ 5 planes: 2 each (height 1 + length 1) ○ Maximum of 1 mm tolerance 	10
<p><u>Note:</u> If the drawing is done in first angle orthographic projection only the front view will be marked.</p>		
OCTAGON	<ul style="list-style-type: none"> ○ 8 sides: 1 mark each 	8
HEXAGON	<ul style="list-style-type: none"> ○ 6 sides: 1 mark each 	6

GENERAL (Without mask)

MEASUREMENTS	<ul style="list-style-type: none"> ○ 3 measurements: 2 each, calculated as follows: <ul style="list-style-type: none"> - Extension line (1) - Dimension line (1) - Arrow head (1) - Dimensioning (1) - Diameter symbol of circle (1) $(4 + 2) = 2$ 	6
SYMBOL	<ul style="list-style-type: none"> ○ 3 marks, calculated as follows: <ul style="list-style-type: none"> - Front view ($\frac{1}{2}$) - Left view ($\frac{1}{2}$) - Centre-lines (1) 	2

TOTAL: 48 ÷ 2

Approximate to integer: 24

VRAAG 2: BOEKSTUT - HULPAANSIG

AKKURAA THEID (Met masker)

HULPAANSIG	<ul style="list-style-type: none"> ○ 8 vlakke: 2 elk (hoogte 1 + lengte 1) ○ Maksimum van 1 mm toleransie 	16
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QUESTION 2: BOOKEND - AUXILIARY VIEW

ACCURACY (With mask)

AUXILIARY VIEW	<ul style="list-style-type: none"> ○ 8 planes: 2 each (height 1 + length 1) ○ Maximum of 1 mm tolerance 	16
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VRAAG 3: KLEREHANGER - ISOMETRIES

INSIG (Sonder masker)

PLASING	1. Sinvolle plasing van aansigte los van mekaar en gereed om te voeg: (2)	10
	2. Plasing van aansigte ten opsigte van vraag: (4 of 8)	

ALGEMEEN (Sonder masker)

LYNE	1. Drie tipes lyne: <ul style="list-style-type: none"> ○ Randlyne (donker) (3) ○ Kortstrepieslyne (lig) (3) ○ Projeksielyne (baie lig) (2) 	8
VERSTEEKTE BESONDERHEDE VAN A	2. 21 lyne: 1 punt elk	21

AKKURAAATHEID (Met masker)

DEEL A	<ul style="list-style-type: none"> ○ 8 vlakke: 4 elk (hoogte 2 + lengte 2) ○ Maksimum van 1 mm toleransie 	32
DEEL B	<ul style="list-style-type: none"> ○ 11 vlakke: 4 elk (hoogte 2 + lengte 2) (44) ○ Isometriese boë (5) ○ Maksimum van 1 mm toleransie 	49

TOTAAL: 120 ÷ 4

Benader tot heelgetal: 30

QUESTION 3: COAT HANGER - ISOMETRIC

PERCEPTION (Without mask)

PLACING	1. Placing of views, apart from each other and ready to joint: (2)	10
	2. Placing according to question: (4 of 8)	

GENERAL (Without mask)

LINES	1. Four types of lines: <ul style="list-style-type: none"> ○ Outline (dark) (3) ○ Dashed lines (light) (3) ○ Projection lines (very light) (2) 	8
HIDDEN DETAIL OF B	2. 21 lines: 1 piont each	21

ACCURACY (With mask)

PART A	<ul style="list-style-type: none"> ○ 8 planes: 4 each (height 2 + length 2) ○ Maximum of 1 mm tolerance 	32
PART B	<ul style="list-style-type: none"> ○ 11 planes: 4 each (height 2 + length 2) (44) ○ Isometric curves (5) ○ Maximum of 1 mm tolerance 	49

TOTAL:		120 ÷ 4
Approximate to integer:		30

VRAAG 4: KABINET - ORTOGRAFIES

INSIG (Sonder masker)

TWEE AANSIGTE GETEKEN	1. Vooraansig (10) 2. Deursnee linkeraansig (10) Aansigte <u>nie</u> op regte plekke geplaas nie – slegs helfte van punte	20
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ALGEMEEN (Sonder masker)

LYNE	1. Vier tipes lyne: <ul style="list-style-type: none"> ○ Randlyne (donker) = 3 ○ Arseerlyne (lig) = 3 ○ Snylyn (donker en lig) = 1 ○ Kortstrepieslyne (lig) = 2 ○ Projeksielyne (baie lig) = 1 	10
VERSTEEKTE BESONDERHEDE VAN VOORAANSIG	2. 12 lyne: 2 punte elk	24
ARSERING: DEURSNEE LINKERAANSIG	3. Arsering van korrekte vlakke: <ul style="list-style-type: none"> ○ 12 vlakke x 2 	24

AKKURAATHEID (Met masker)

VOORAANSIG	<ul style="list-style-type: none"> ○ 13 vlakke: 4 elk (hoogte 2 + lengte 2) ○ Maksimum van 1 mm toleransie 	52
DEURSNEE LINKERAANSIG	<ul style="list-style-type: none"> ○ 20 vlakke: 4 elk (hoogte 2 + lengte 2) ○ Maksimum van 1 mm toleransie 	80

TOTAAL: 210 ÷ 7

Benader tot heelgetal: 30

QUESTION 4: CABINET - ORTHOGRAPHIC

PERCEPTION (Without mask)

THREE VIEWS DRAWN	1. Front view (10) 2. Sectional left view (10) Views <u>not</u> put on right places – half of the points	20
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GENERAL (Without mask)

LINES	1. Four types of lines: <ul style="list-style-type: none"> ○ Outline (dark) = 3 ○ Hachure (light) = 3 ○ Cutting line (dark and light) = 1 ○ Dashed lines (light) = 2 ○ Projection lines (very light) = 1 	10
HIDDEN DETAIL OF FRONT VIEW	2. 12 lines: 2 points each	24
HACHURING: SECTIONAL LEFT VIEW	3. Hachure of correct planes: <ul style="list-style-type: none"> ○ 12 planes x 2 	24

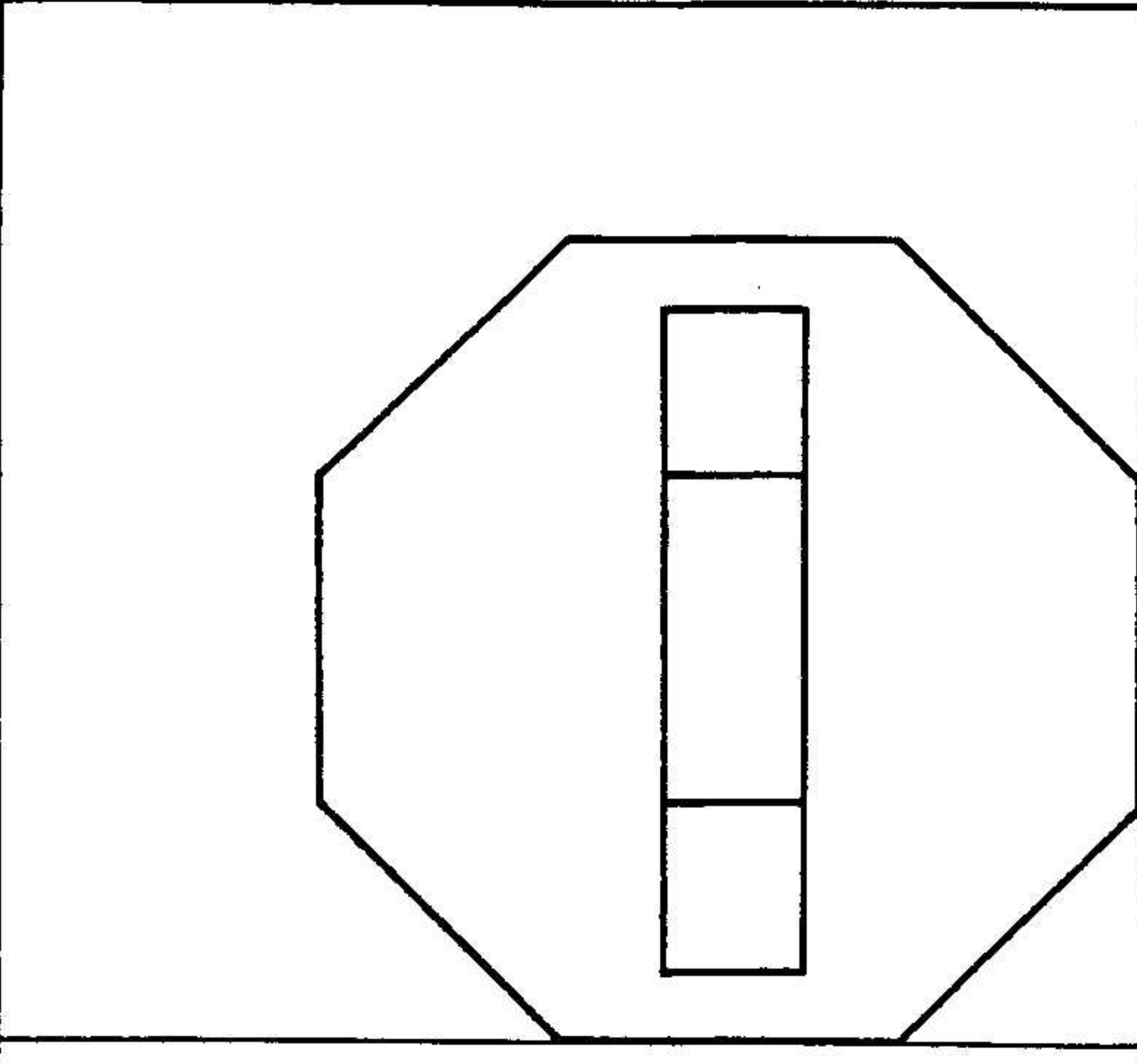
ACCURACY (With mask)

FRONT VIEW	<ul style="list-style-type: none"> ○ 13 planes: 4 each (height 2 + length 2) ○ Maximum of 1 mm tolerance 	52
SECTIONAL LEFT VIEW	<ul style="list-style-type: none"> ○ 20 planes: 4 each (height 2 + length 2) ○ Maximum of 1 mm tolerance 	80

TOTAL:	210 ÷ 7
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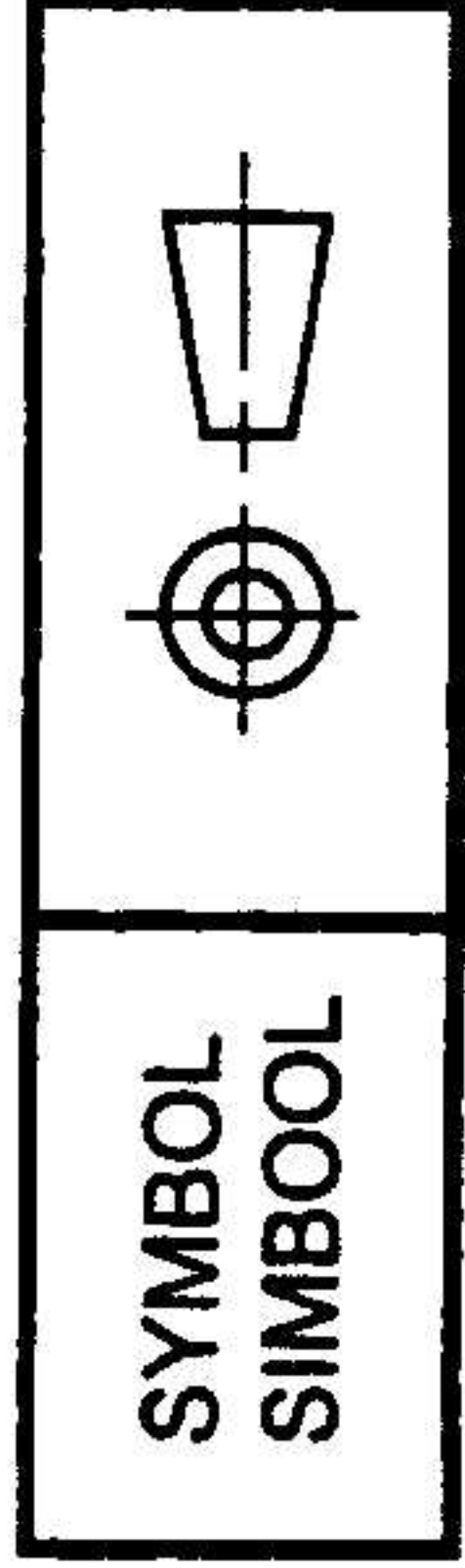
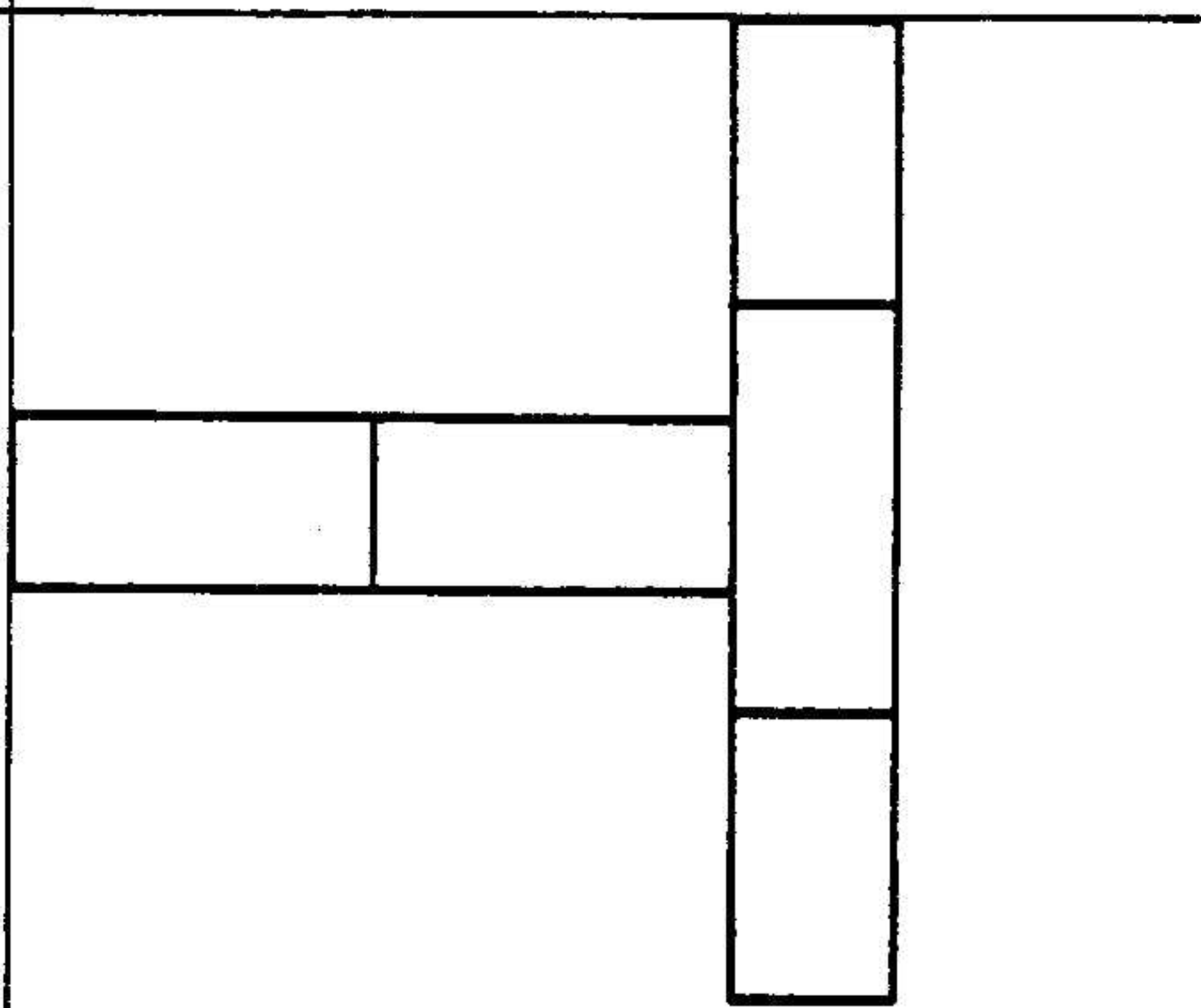
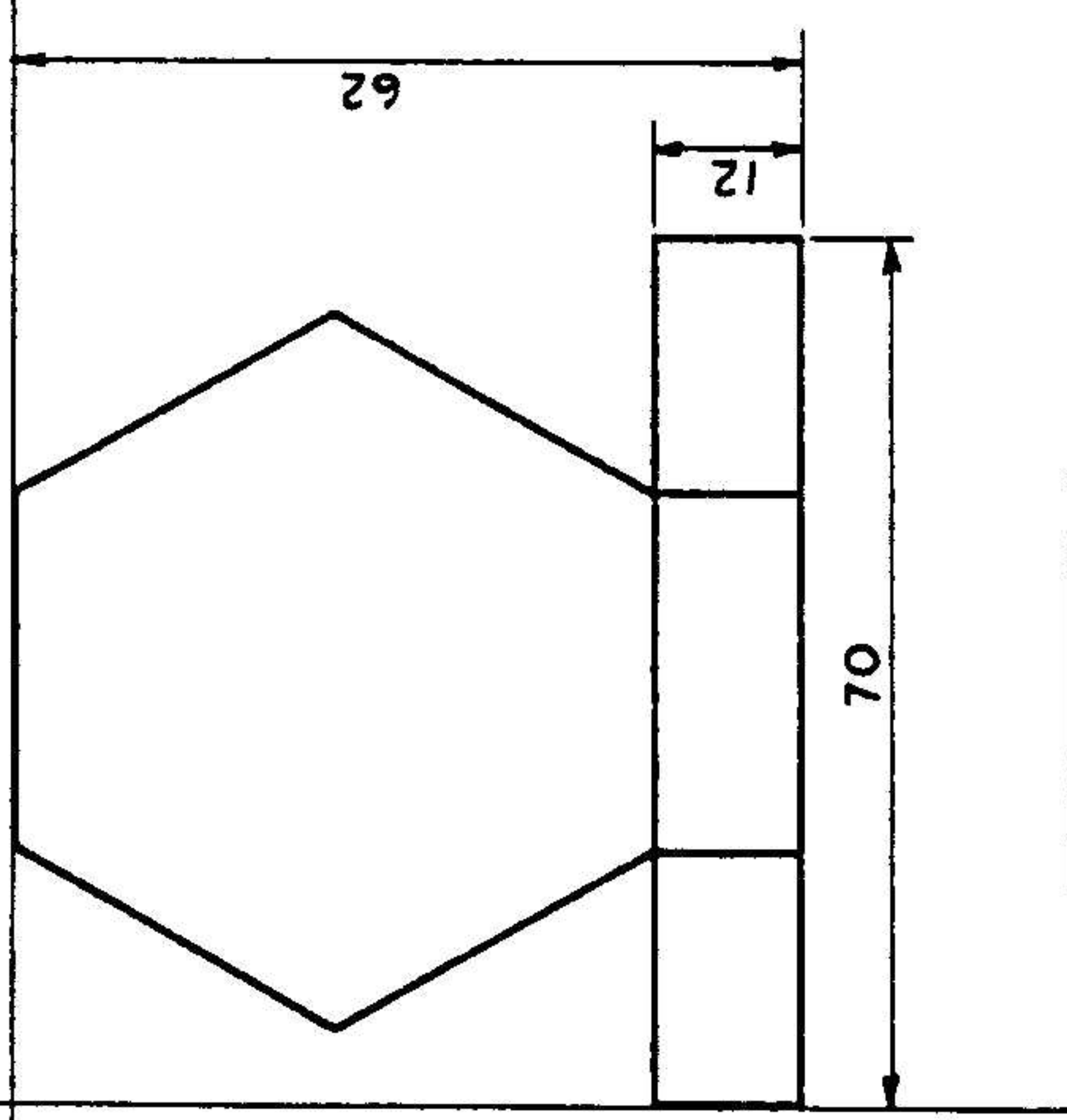
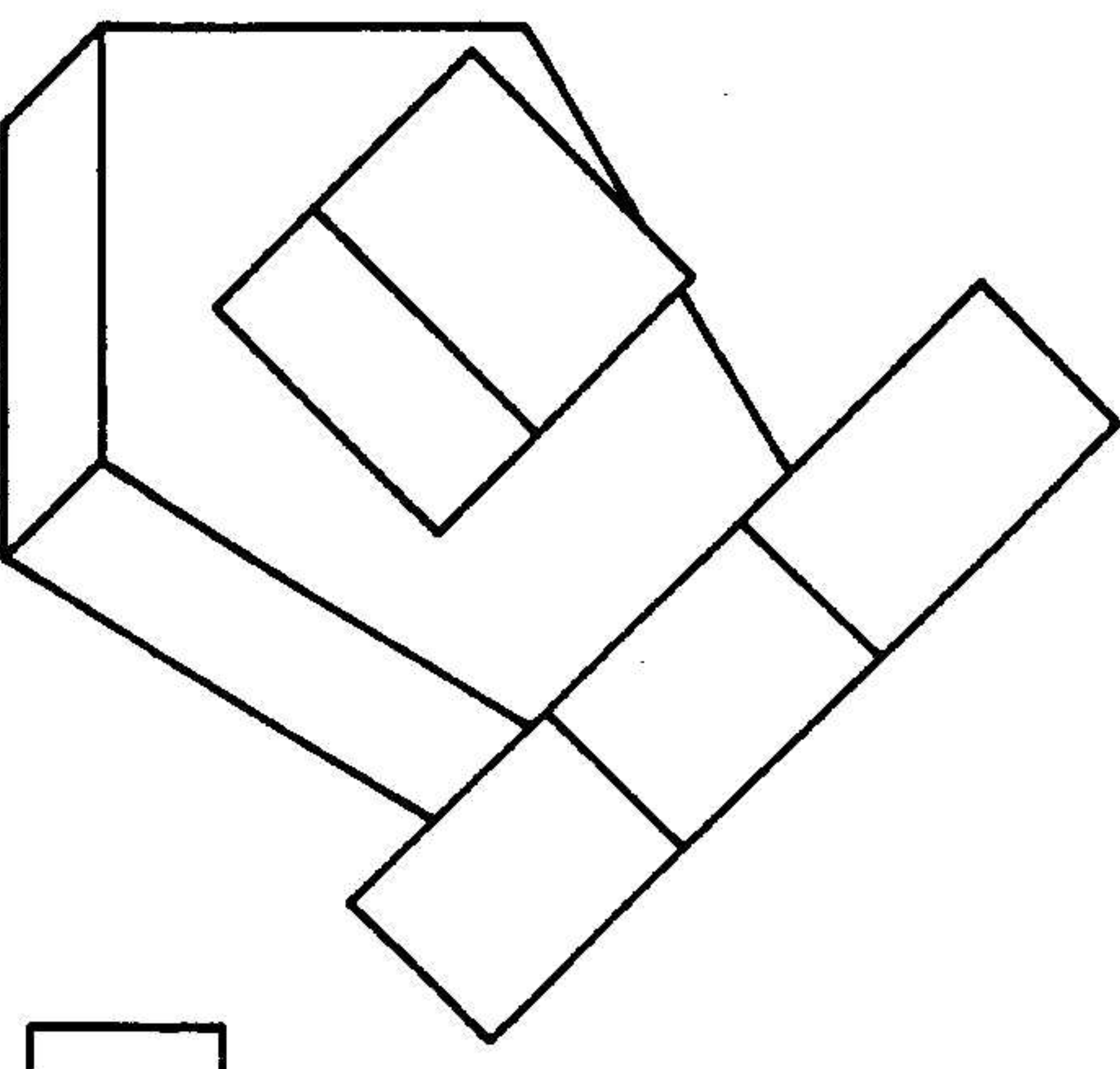
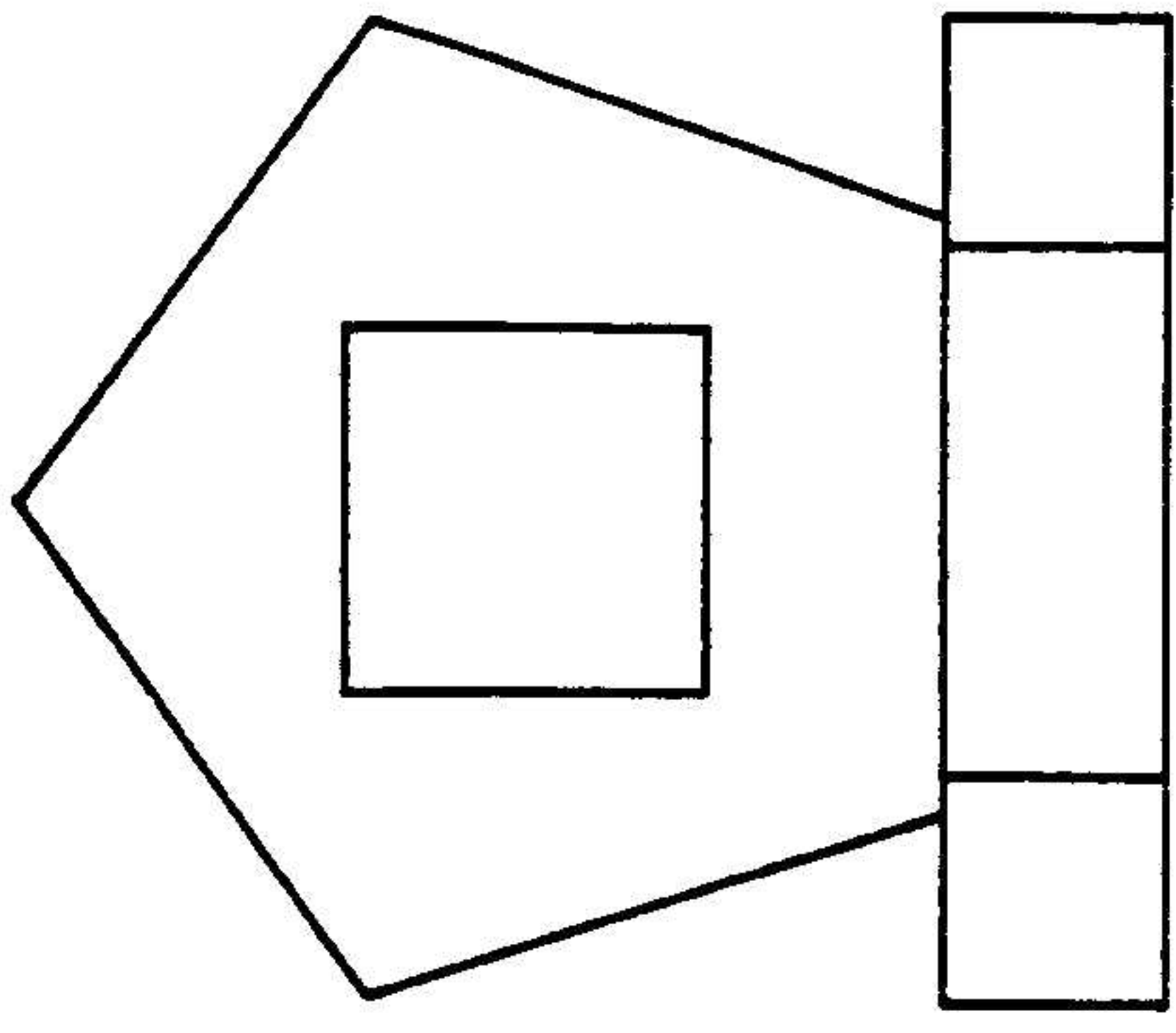
Approximate to integer:	30
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QUESTION
VRAAG 1



QUESTION
VRAAG 2

ANSWER SHEET
ANTWOORDVEL 1



Accuracy / Akkuraatheid	
• Front view / Voorraansig	8
• Top view / Bo-aansig	8
• Left view / Linkeraansig	10
• Octagon / Agthoek	8
• Hexagon / Seshoek	6
Measurements / Afmetings	6
Symbol / Simbool	2
TOTAL / TOTAAL	48
	+2
	24

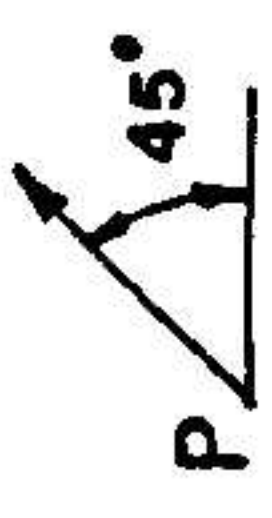
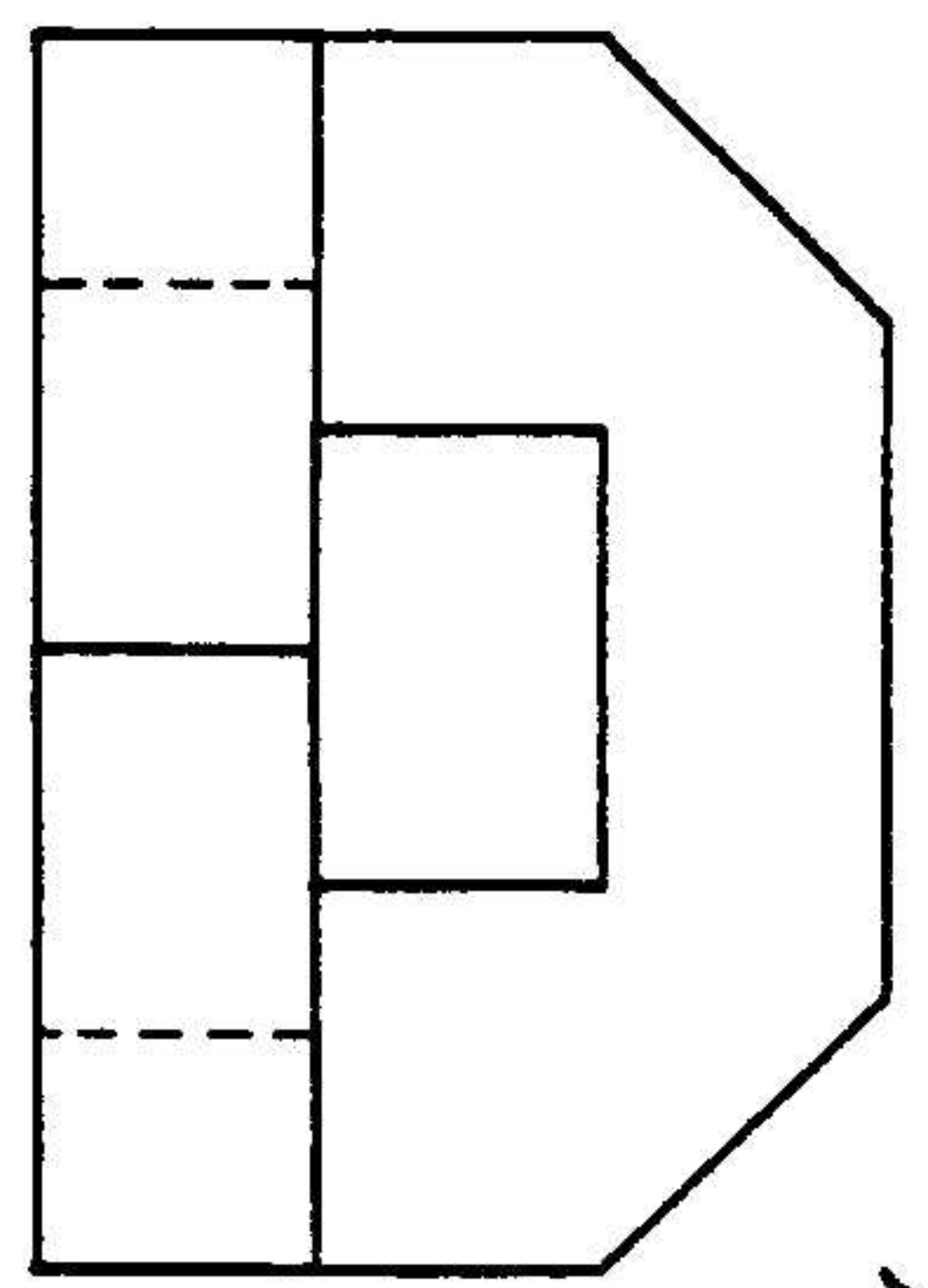
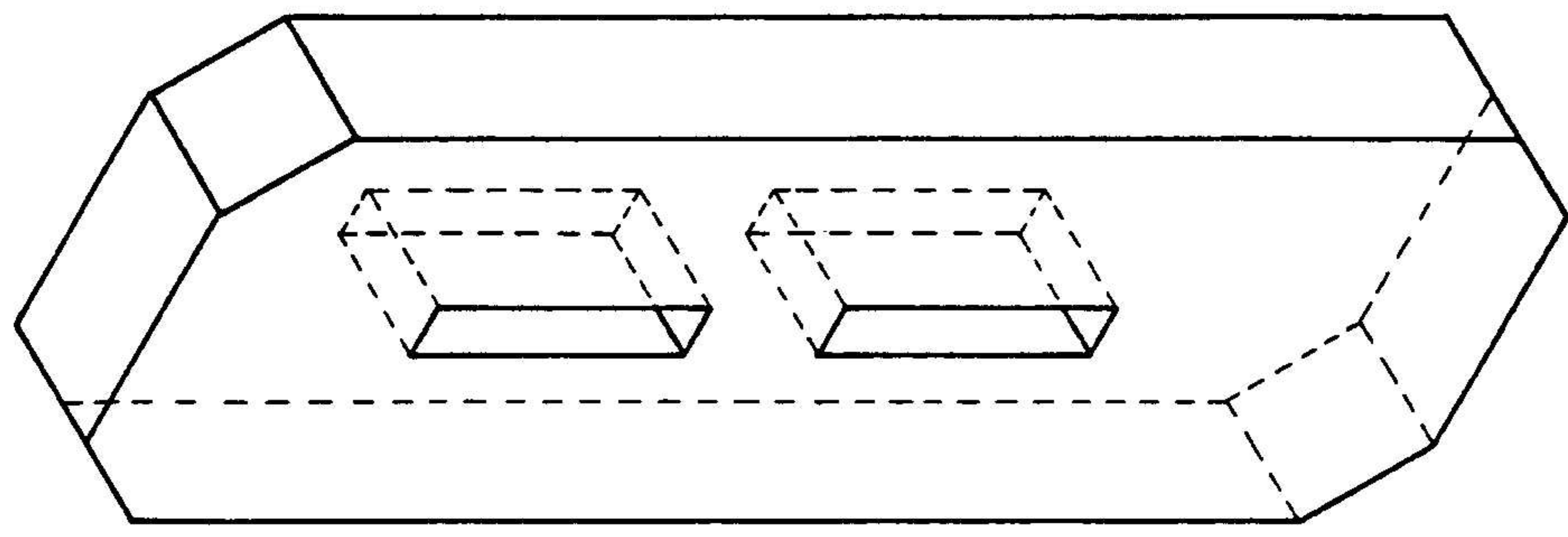
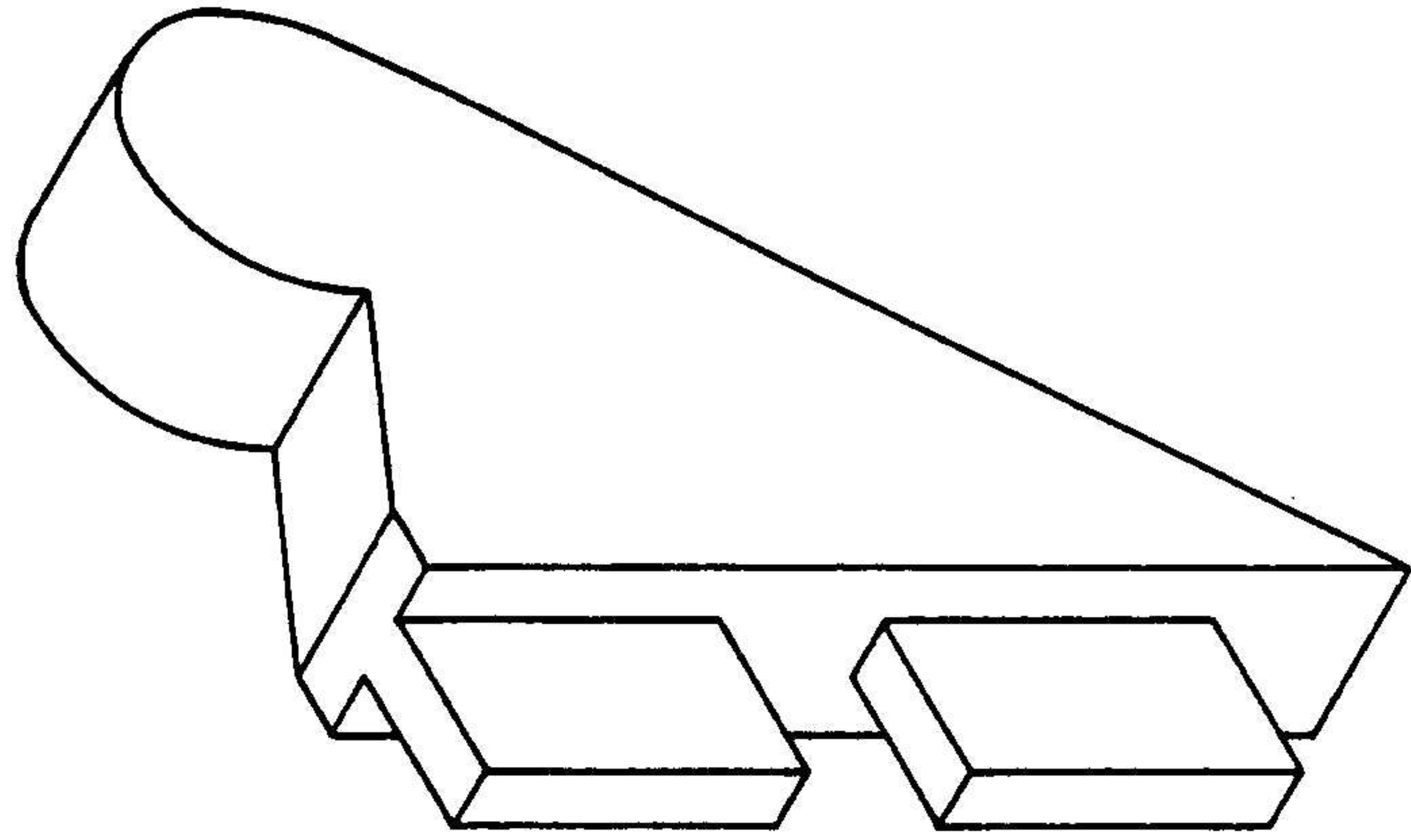


FIG. 2

(16)

EXAMINATION NUMBER / EKSAMENNUMMER



32

PERCEPTION / INSIG

• Placing / Plasing	10
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GENERAL / ALGEMEEN

• Lines / Lyne	8
• Hidden detail of A / Versteekte besonderhede van A	21

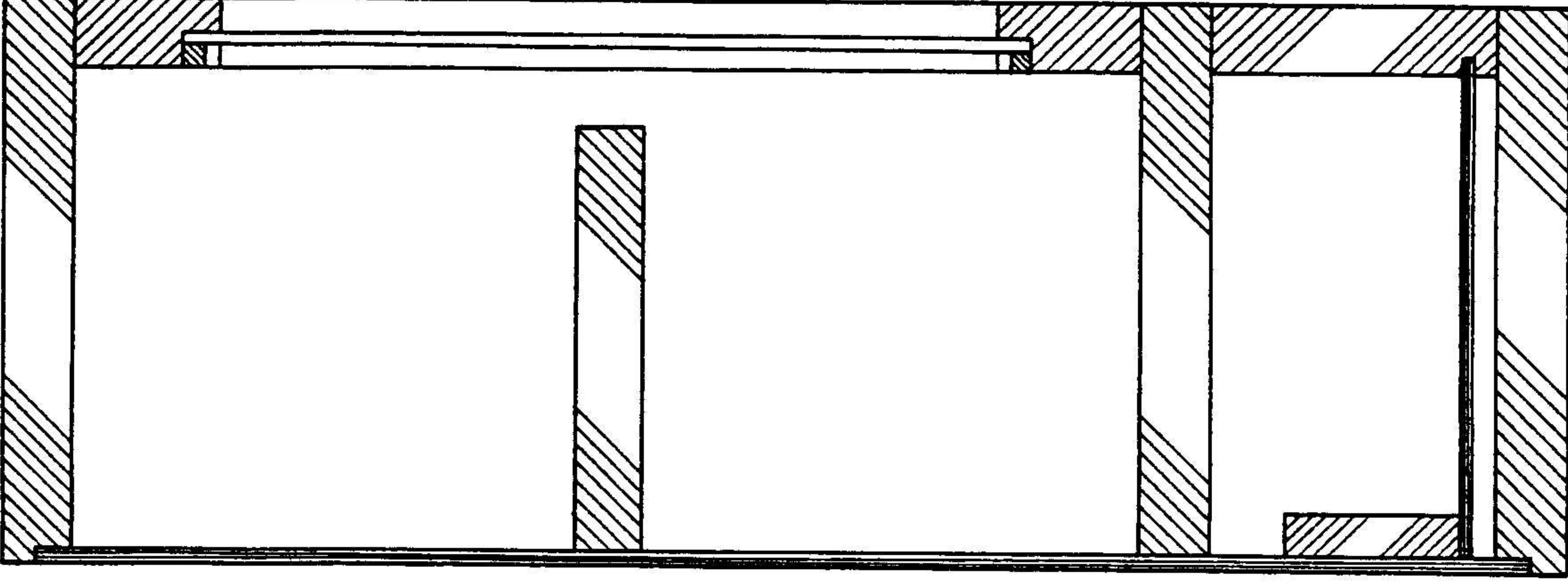
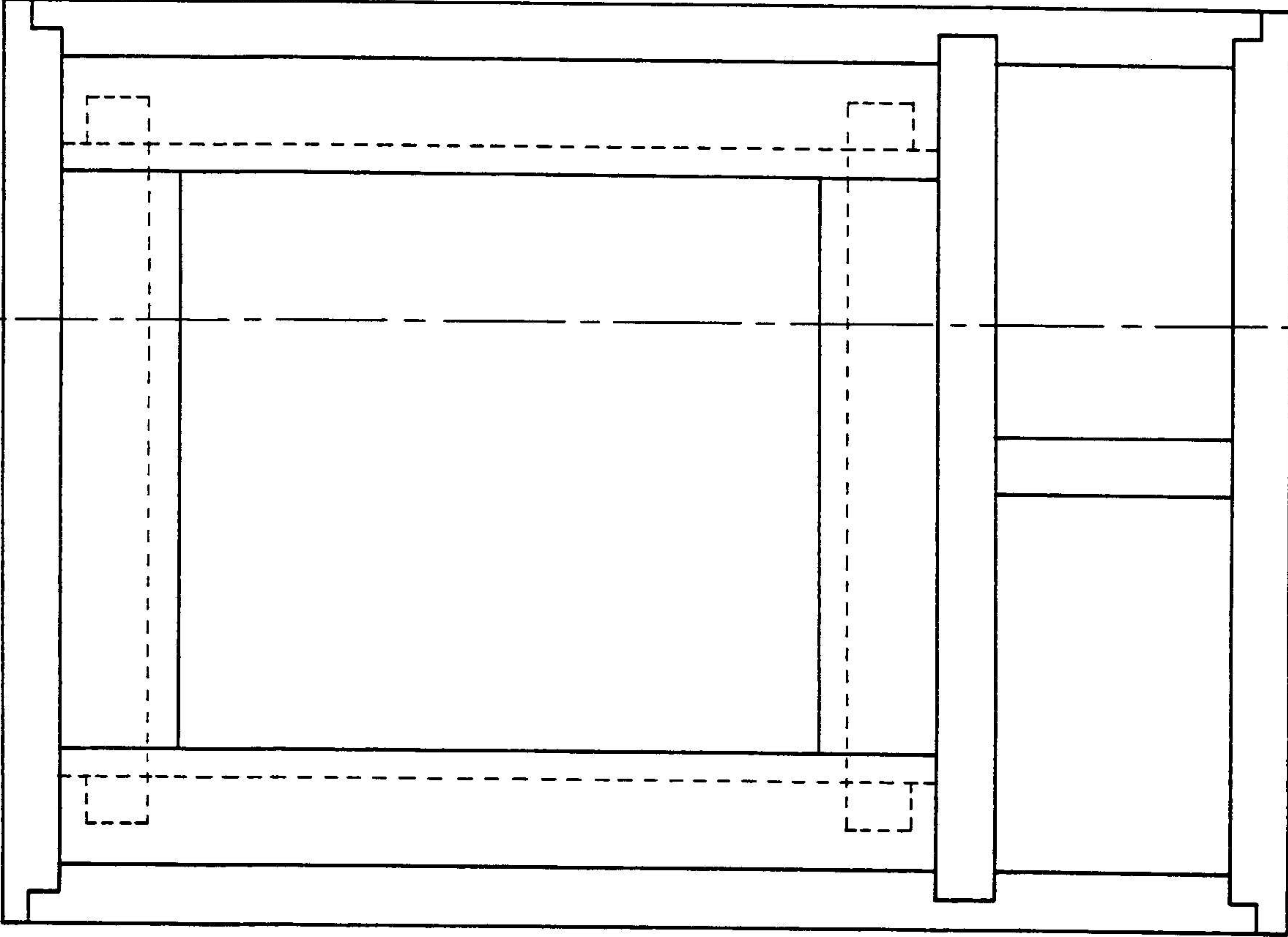
ACCURACY / AKKURAAATHEID

• Part A / Deel A	32
• Part B / Deel B	49

Sub total / Sub-totaal:	120
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TOTAL / TOTAAL:	30
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33

PERCEPTION / INSIG

- Views drawn /
Aansigte geteken

20

GENERAL / ALGEMEEN

- Lines /
Lynne

10

- Hidden detail /
Versteekte besonderhede

24

- Hatching /
Arsering

24

ACCURACY / AKKURAAATHEID

- Front view /
Voorraansig

52

- Sectional left view /
Deursnee linkeraansig

80

Sub total / Sub-totaal: 210

TOTAL / TOTAAL: 30