

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

**NATIONAL SENIOR CERTIFICATE
NASIONALE SENIOR SERTIFIKAAT**

GRADE 12

GRAAD 12

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

SEPTEMBER 2018

**MARKING GUIDE
NASIENRIGLYN**

PUNTE: 200

MARKS: 200

TYD: 3 uur

TIME: 3 hours

Die nasienriglyn bestaan uit 6 bladsye.

This marking guide consists of 6 pages.

Kopiereg voorbehou

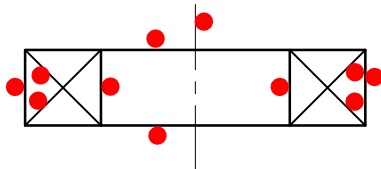
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| ANTWOORDE | | |
|-----------|---|-----------|
| 1 | 2017/10/25 | 1 |
| 2 | DW ENGINEERING | 1 |
| 3 | 1 : 2 | 1 |
| 4 | 300 | 1 |
| 5 | TOEVOERGROOTTE | 1 |
| 6 | pump3.dwg | 1 |
| 7 | 0,10 | 1 |
| 8 | 3 | 1 |
| 9 | VOLLEDIGE DEURSNEE | 1 |
| 10 | GERIGTE DEURSNEE | 1 |
| 11 | DEURDRINGINGSKURWE | 1 |
| 12 | SIMMETRIES | 1 |
| 13 | AANSIG NIE VOLTOOI NIE | 1 |
| 14 | BINNERONDING | 1 |
| 15 | SKROEFDRAAD IS 2 MM DIEP | 1 |
| 16 | ARSERING MOET IN SELFDE RIGTING WEES | 1 |
| 17 | ^{1✓} A 120° ^{1✓} B 11,2 | 2½ |
| 18 | ^{1✓} R59 | 1½ |
| 19 | | 6 |
| | TOTAAL | 26 |

| ANSWERS | | |
|---------|---|-----------|
| 1 | 2017/10/25 | 1 |
| 2 | DW ENGINEERING | 1 |
| 3 | 1 : 2 | 1 |
| 4 | 300 | 1 |
| 5 | INLET SIZE | 1 |
| 6 | pump3.dwg | 1 |
| 7 | 0,10 | 1 |
| 8 | 3 | 1 |
| 9 | FULL SECTION | 1 |
| 10 | ALIGNED SECTION | 1 |
| 11 | CURVE OF INTERPENETRATION | 1 |
| 12 | SYMMETRICAL | 1 |
| 13 | VIEW NOT COMPLETED | 1 |
| 14 | FILLET | 1 |
| 15 | SCREW THREAD IS 2 MM DEEP | 1 |
| 16 | SECTIONING SHOULD BE IN SAME DIRECTION | 1 |
| 17 | ^{1✓} A 120° ^{1✓} B 11,2 | 2½ |
| 18 | ^{1✓} R59 | 1½ |
| 19 | | 6 |
| | TOTAL | 26 |

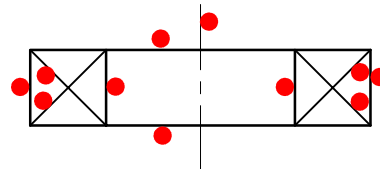
ANTWOORD 19

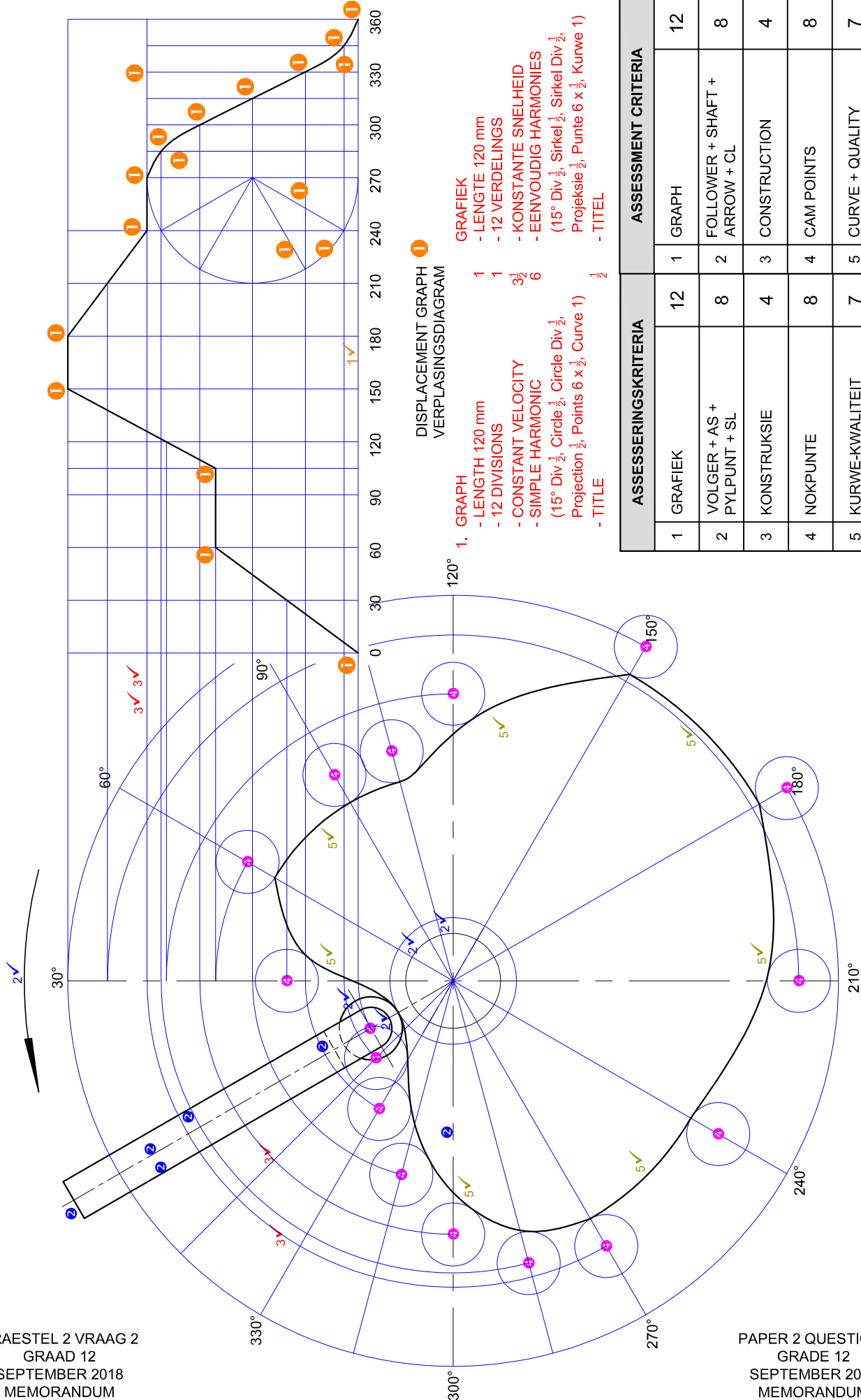
● VRYHAND

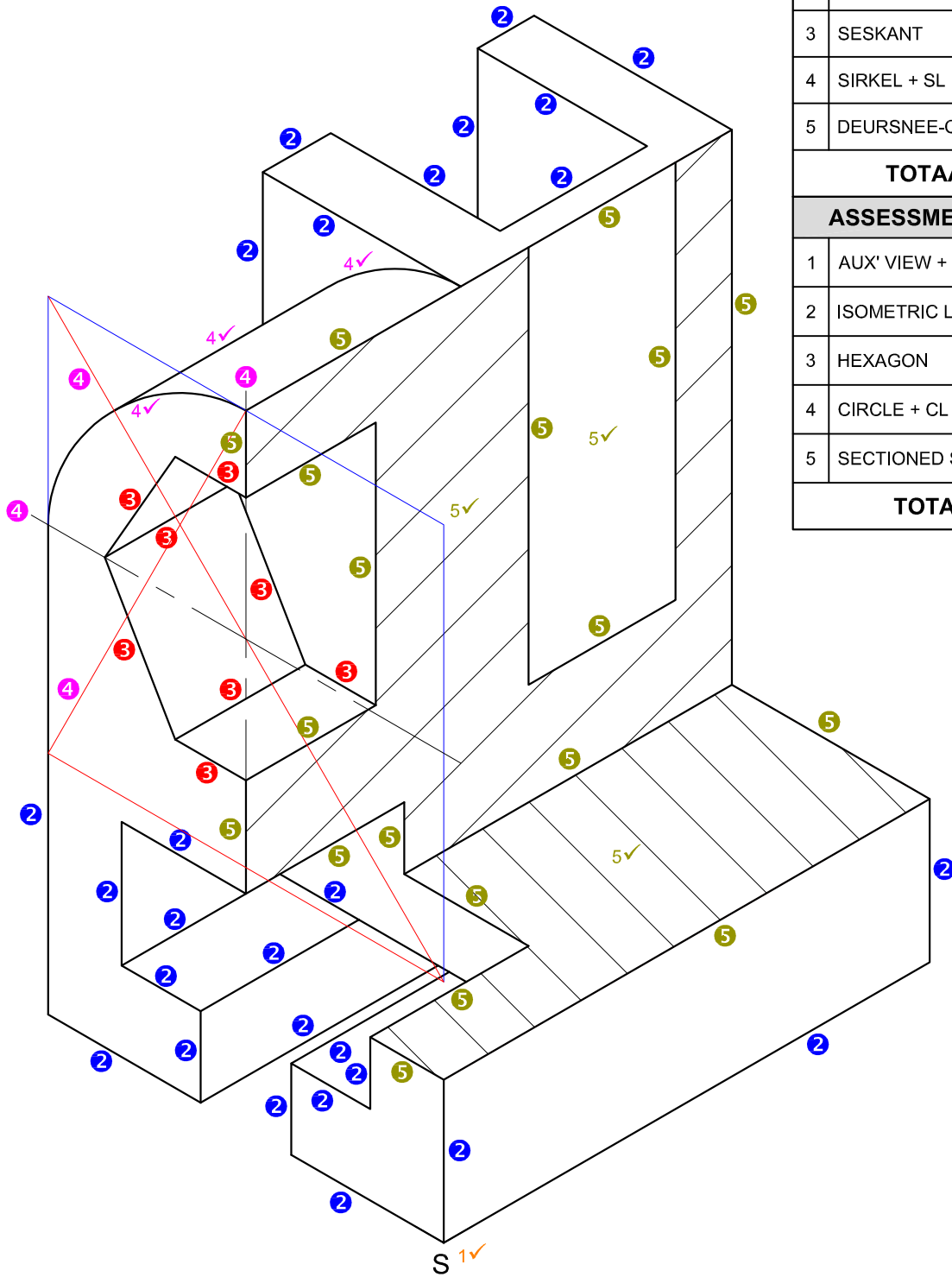
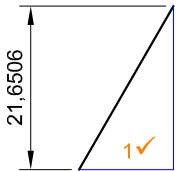


ANSWER 19

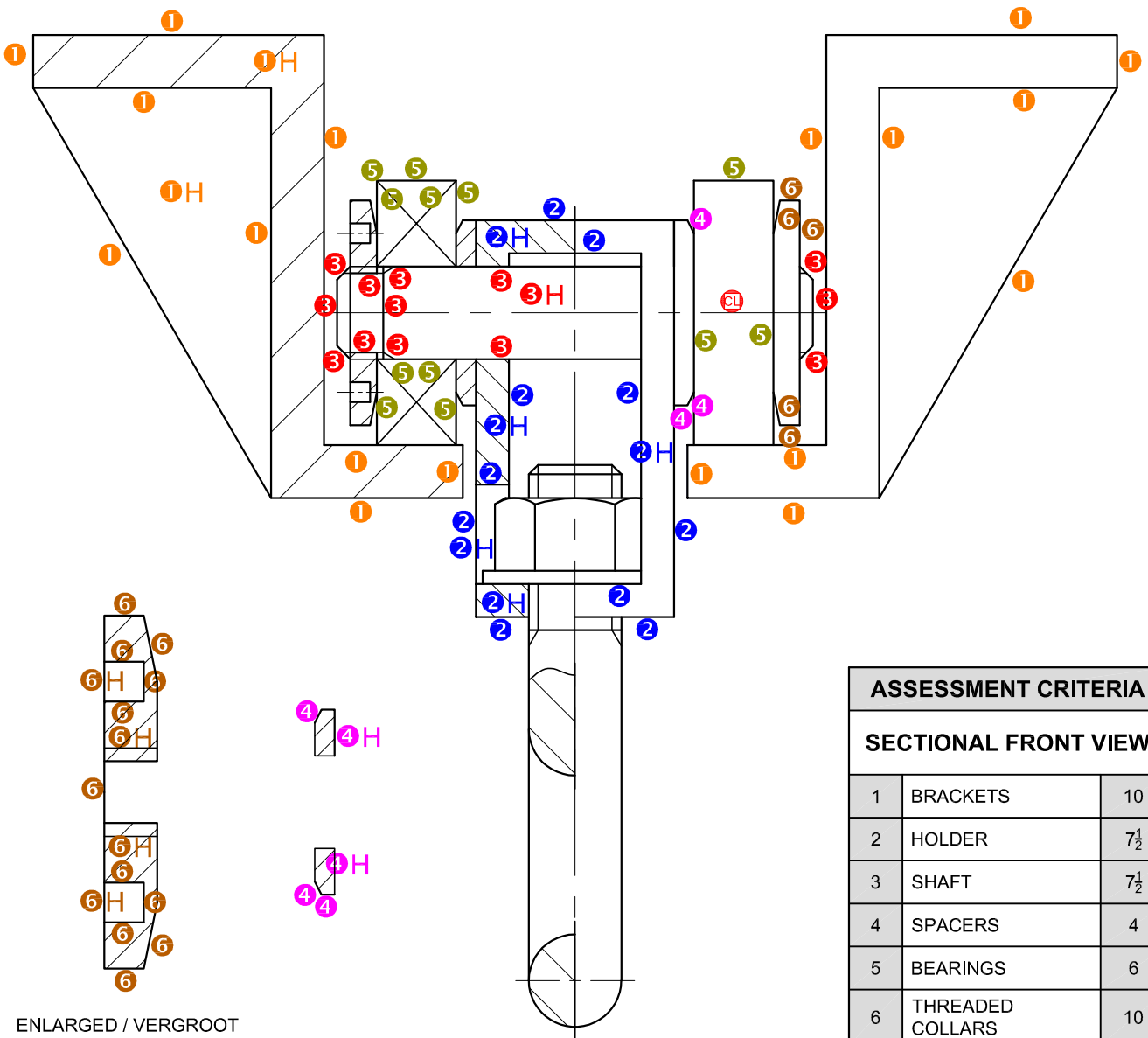
● FREEHAND







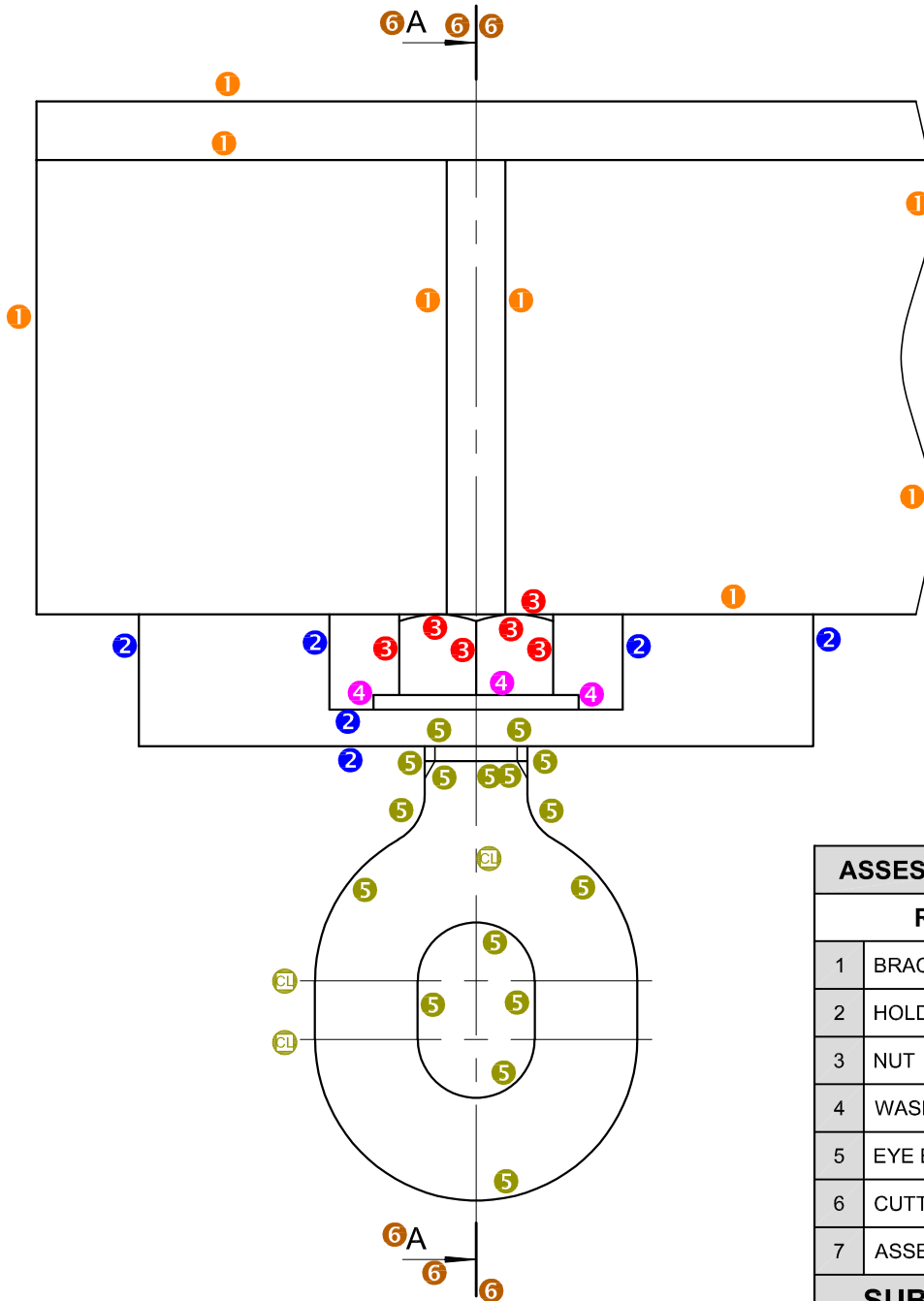
| ASSESSERINGSKRITERIA | | |
|----------------------|----------------------|-----------|
| 1 | HULPAANSIG + PLASING | 2 |
| 2 | ISOMETRIESE LYNE | 13½ |
| 3 | SESKANT | 4 |
| 4 | SIRKEL + SL | 5 |
| 5 | DEURSNEE-OPPERVLAK | 12½ |
| TOTAAL | | 37 |
| ASSESSMENT CRITERIA | | |
| 1 | AUX' VIEW + PLACING | 2 |
| 2 | ISOMETRIC LINES | 13½ |
| 3 | HEXAGON | 4 |
| 4 | CIRCLE + CL | 5 |
| 5 | SECTIONED SURFACE | 12½ |
| TOTAL | | 37 |



ENLARGED / VERGROOT

| ASSESSMENT CRITERIA | | |
|----------------------|------------------|-----------|
| SECTIONAL FRONT VIEW | | |
| 1 | BRACKETS | 10 |
| 2 | HOLDER | 7½ |
| 3 | SHAFT | 7½ |
| 4 | SPACERS | 4 |
| 5 | BEARINGS | 6 |
| 6 | THREADED COLLARS | 10 |
| 7 | NUT | 4½ |
| 8 | WASHER | 1½ |
| 9 | EYE BOLT | 11 |
| SUB-TOTAL | | 62 |
| ASSESSERINGSKRITERIA | | |
| DEURSNEE-VOORAANSIG | | |
| 1 | STEUNSTUKKE | 10 |
| 2 | HOUER | 7½ |
| 3 | AS | 7½ |
| 4 | SPASIEËRDERS | 4 |
| 5 | LAERS | 6 |
| 6 | SKROEFKRAE | 10 |
| 7 | MOER | 4½ |
| 8 | WASSER | 1½ |
| 9 | OOGBOU | 11 |
| SUB-TOTAAL | | 62 |

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 MEMORANDUM



| ASSESSMENT CRITERIA | | |
|----------------------|---------------|-----------|
| RIGHT VIEW | | |
| 1 | BRACKET | 4 |
| 2 | HOLDER | 3 |
| 3 | NUT | 3 |
| 4 | WASHER | 1½ |
| 5 | EYE BOLT | 9½ |
| 6 | CUTTING PLANE | 3 |
| 7 | ASSEMBLY | 12 |
| SUB-TOTAL | | 36 |
| TOTAL | | 98 |
| ASSESSERINGSKRITERIA | | |
| REGTERAANSIG | | |
| 1 | STEUNSTUK | 4 |
| 2 | HOUER | 3 |
| 3 | MOER | 3 |
| 4 | WASSER | 1½ |
| 5 | OOGBOUW | 9½ |
| 6 | SNYLYN | 3 |
| 7 | SAMESTELLING | 12 |
| SUB-TOTAAL | | 36 |
| TOTAAL | | 98 |

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