basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Candidate Barcode Label/*Stafieskodeplakker*

SC/NSC Answer Book
*SS/NSS-antwoordeboek*

**Senior Certificate/National Senior Certificate/*Senior Sertifikaat/Nasionale Senior Sertifikaat* (Grade 12/*Graad 12*)**
**May/June/*Mei/Junie* 2026 Confidential/Vertroulik**

Sequence No. on mark sheet
*Volgnommer op puntestaat*

| | |
|---|---|
| **CENTRE NUMBER** *SENTRUMNOMMER* | |
| **EXAMINATION NUMBER** *EKSAMENNOMMER* | |
| **DATE** *DATUM* | |
| **BOOK NUMBER** *BOEKNOMMER* | **OF** *VAN* **BOOKS** *BOEKE* |
| **SUBJECT CODE** *VAKKODE* | |
| **PAPER NUMBER** *VRAESTELNOMMER* | **2** |
| **SUBJECT NAME** *VAKNAAM* | **TECHNICAL MATHEMATICS/*TEGNIESE WISKUNDE*** |

| **MARKER/*NASIENER*** | | | | **MODERATOR'S INITIALS IN RELEVANT BLOCK/ *MODERATORPARAAF IN BETROKKE BLOKKIE*** | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Question** *Vraag* | **Marks** *Punte* | | | **Marker's Code & Initials** | **Marks** *Punte* | | | **SM** | **Marks** *Punte* | | | **DCM** | **Marks** *Punte* | | | **CM** | **Marks** *Punte* | | | **IM** | **Marks** *Punte* | | | **EM** |
| **1** | | | | | | | | | | | | | | | | | | | | | | | | |
| **2** | | | | | | | | | | | | | | | | | | | | | | | | |
| **3** | | | | | | | | | | | | | | | | | | | | | | | | |
| **4** | | | | | | | | | | | | | | | | | | | | | | | | |
| **5** | | | | | | | | | | | | | | | | | | | | | | | | |
| **6** | | | | | | | | | | | | | | | | | | | | | | | | |
| **7** | | | | | | | | | | | | | | | | | | | | | | | | |
| **8** | | | | | | | | | | | | | | | | | | | | | | | | |
| **9** | | | | | | | | | | | | | | | | | | | | | | | | |
| **10** | | | | | | | | | | | | | | | | | | | | | | | | |
| **11** | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| **TOTAL** *TOTAAL* | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |

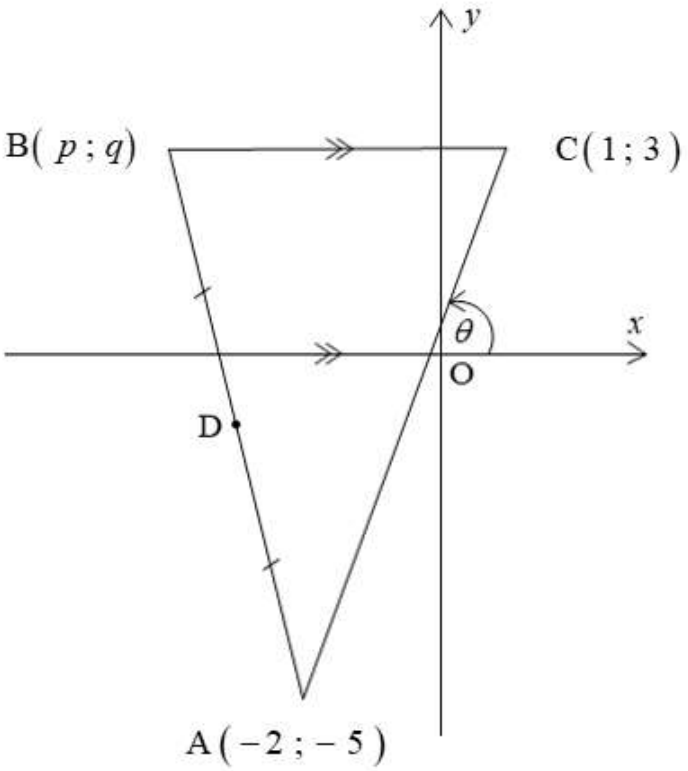
| | | |
|---|---|---|
| **CONTROLLED AND CERTIFIED CORRECT (SURNAME AND INITIALS OF EA)** ***GEKONTROLEER EN AS KORREK GESERTIFISEER (VAN EN VOORLETTERS VAN EA)*** | | READ INSTRUCTIONS ON THE NEXT PAGE. *LEES INSTRUKSIES OP DIE VOLGENDE BLADSY.* |

**This answer book consists of 24 pages./*Hierdie antwoordeboek bestaan uit 24 bladsye.***

*Copyright reserved/Kopiereg voorbehou*

| **PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY** | ***VOLG ASSEBLIEF HIERDIE INSTRUKSIES NOUKEURIG*** |
|---|---|
| 1. Your examination number and centre number must be clearly written in the space provided and attach your examination number sticker in the space provided. | *1. Skryf jou eksamennommer en sentrumnommer duidelik in die ruimtes verskaf en plak jou eksamennommeretiket in die ruimte verskaf.* |
| 2. Remember that your own name (or the name of your school) may not appear anywhere on or in this answer book. | *2. Onthou dat jou eie naam (of die naam van jou skool) nie op of in hierdie antwoordeboek mag voorkom nie.* |
| 3. Answer ALL questions in the spaces provided. | *3. Beantwoord ALLE vrae in die ruimtes wat verskaf is.* |
| 4. No pages may be torn from this answer book. | *4. Geen bladsye mag uit hierdie antwoordeboek geskeur word nie.* |
| 5. Read the instructions printed on your timetable carefully as well as any other instructions which may be given in each examination paper. | *5. Lees die instruksies wat op jou eksamenrooster gedruk is sorgvuldig deur, asook enige ander instruksies wat in elke eksamenvraestel gegee word.* |
| 6. Candidates may not retain an answer book or remove it from the examination room. Answer books must be returned to the invigilator at the end of the examination session. | *6. Geen antwoordeboek mag deur die kandidaat behou of uit die eksamenlokaal verwyder word nie. Antwoordeboeke moet aan die einde van die eksamensessie aan die toesighouer terugbesorg word.* |
| 7. Write answers in black/blue ink as distinctly as possible. Do NOT write in the margins. | *7. Skryf die antwoorde so duidelik moontlik met swart/blou ink. MOENIE in die kantlyne skryf NIE.* |
| 8. Indicate the questions you have answered by drawing a circle around the relevant numbers on the front cover of this answer book where marks are to be recorded. | *8. Dui die vrae wat jy beantwoord het op die voorblad van hierdie antwoordeboek aan, waar die punte aangebring word, deur 'n kringetjie om die nommers van die vrae wat jy beantwoord het, te trek.* |
| 9. Draw a line through any work/rough work that must not be marked. | *9. Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie.* |
| 10. In the event that you use the additional space provided in this special answer book:<br>10.1 Write down the question number.<br>10.2 Leave a line and rule off after your answer. | *10. In geval jy die bykomende ruimte wat aan die einde van hierdie antwoordeboek verskaf is, gebruik:*<br>*10.1 Skryf die vraagnommer neer*<br>*10.2 Laat 'n lyn oop en trek 'n lyn na jou antwoord.* |

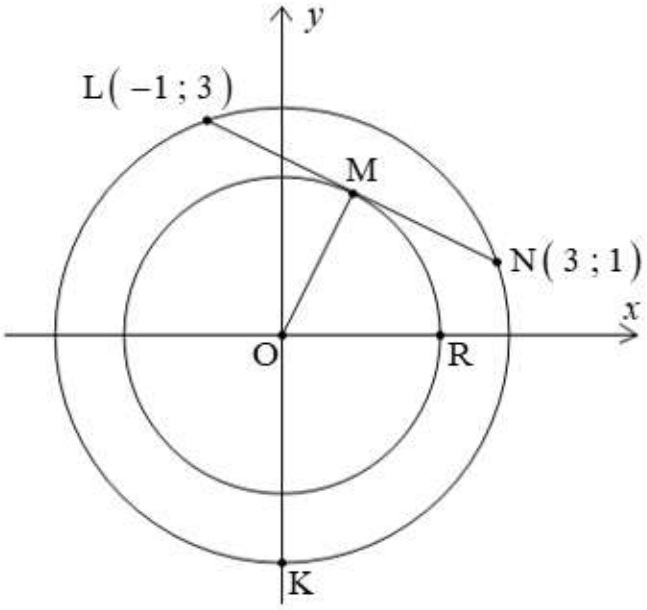
**QUESTION/*VRAAG* 1**



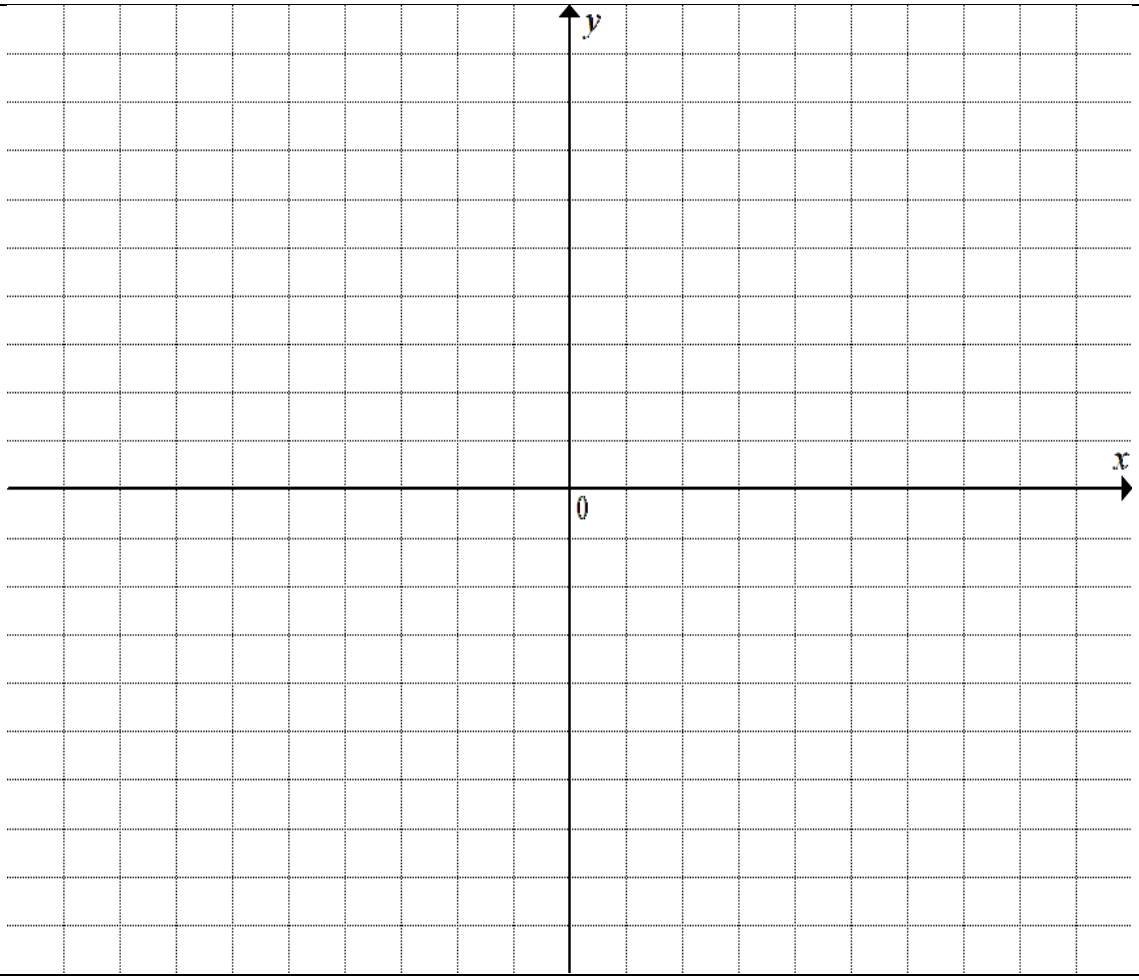

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 1.1.1 | | (1) |
| 1.1.2 | | (1) |
| 1.1.3 | | (2) |

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 1.1.4 | | (2) |
| 1.1.5 | | (2) |
| 1.2.1 | | (1) |
| 1.2.2 | | (1) |
| 1.2.3 | | (2) |
| | | **[12]** |

**QUESTION/*VRAAG* 2**




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 2.1.1 | | (2) |
| 2.1.2 | | (2) |
| 2.1.3 | | (1) |
| 2.1.4 | | (5) |

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 2.2.1 | | (1) |
| 2.2.2 |  | (2) |
| | | **[13]** |

**QUESTION/*VRAAG* 3**

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 3.1.1 | | (1) |
| 3.1.2 | | (3) |
| 3.2 | | (5) |

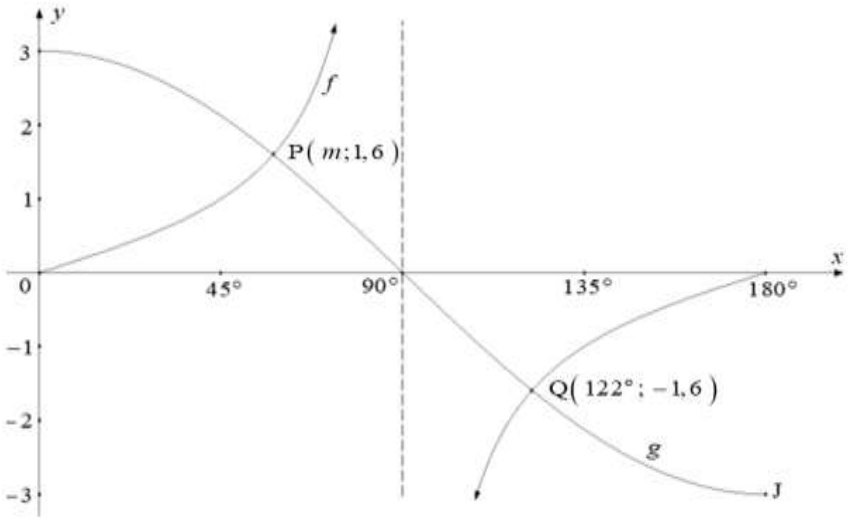
| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 3.3.1 | | |
| | | |
| | | (2) |
| 3.3.2 | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | (3) |
| | | **[14]** |

**QUESTION/*VRAAG* 4**

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 4.1.1 | | (1) |
| 4.1.2 | | (1) |
| 4.1.3 | | (5) |
| 4.2.1 | | (1) |
| 4.2.2 | | (1) |

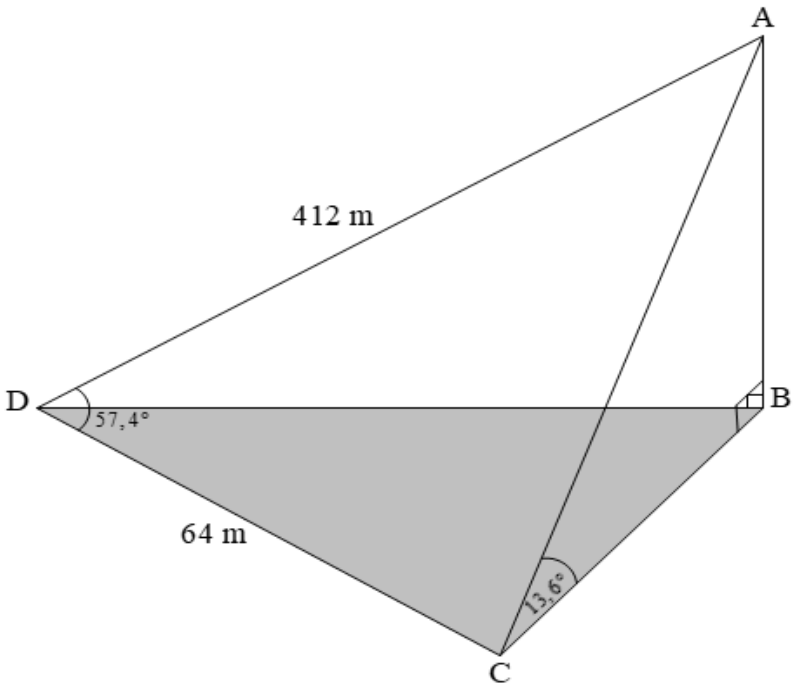
| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 4.2.3 | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | (3) |
| | | **[12]** |

**QUESTION/*VRAAG* 5**




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 5.1 | | (1) |
| 5.2 | | (1) |
| 5.3 | | (2) |
| 5.4 | | (2) |
| 5.5 | | (2) |
| 5.6 | | (4) |
| 5.7 | | (1) |
| 5.8 | | (2) |
| | | **[15]** |

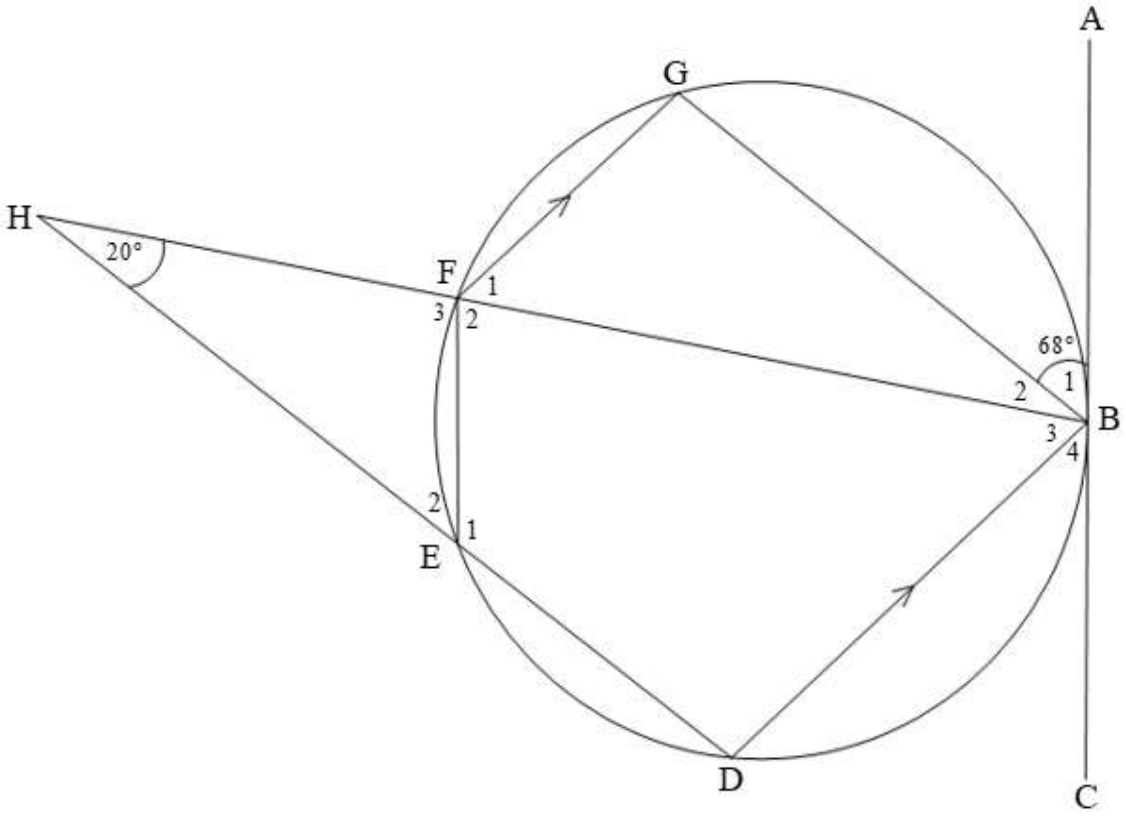
**QUESTION/*VRAAG* 6**




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 6.1 | | (3) |
| 6.2 | | (6) |
| | | **[9]** |

**Give reasons for your statements in QUESTIONS 7, 8 and 9.**
***Gee redes vir jou bewerings in VRAAG 7, 8 en 9.***

**QUESTION/*VRAAG* 7**

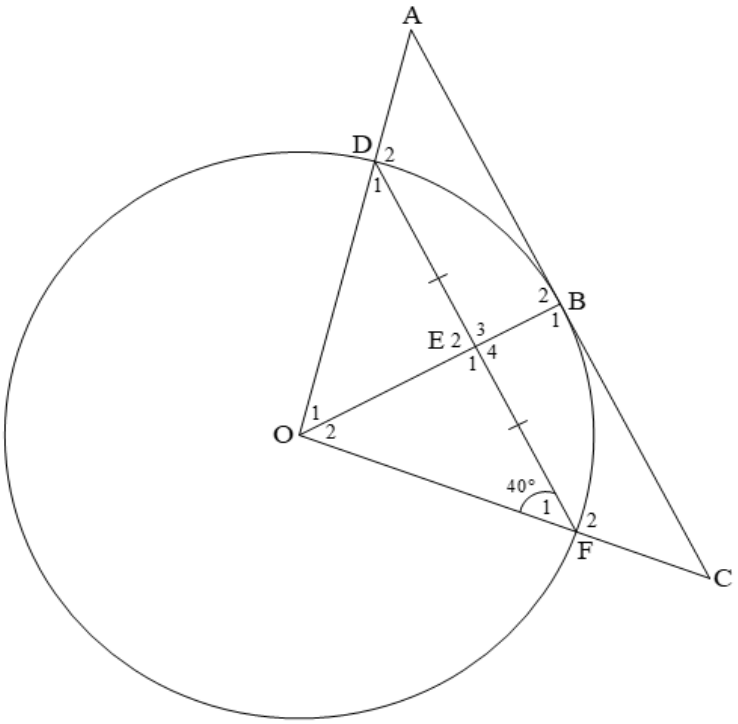



| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 7.1 | | (1) |
| 7.2.1 | | (2) |
| 7.2.2 | | (2) |
| 7.2.3 | | (2) |

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 7.2.4 | | |
| | | |
| | | (2) |
| 7.2.5 | | |
| | | |
| | | (2) |
| | | **[11]** |

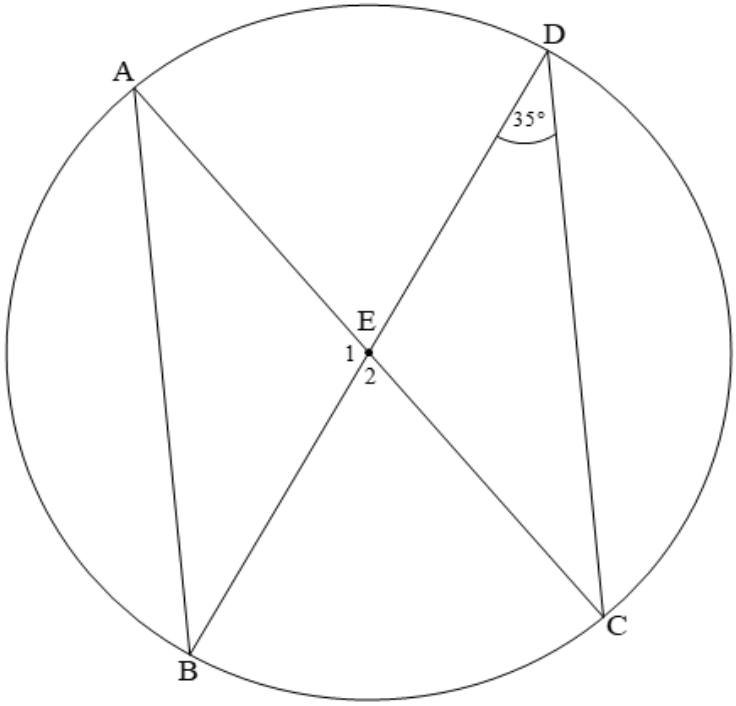
## QUESTION/*VRAAG* 8

8.1




| | **Solution/*Oplossing*** | | **Marks** ***Punte*** |
|---|---|---|---|
| 8.1.1 | | | |
| | **STATEMENT/*BEWERING*** | **REASON/*REDE*** | |
| | (a) $OE \perp DF$ | | (1) |
| | (b) $OB \perp AC$ | | (1) |
| | (c) $AC \parallel DF$ | | (1) |
| 8.1.2 | | | (3) |
| 8.1.3 | | | (1) |

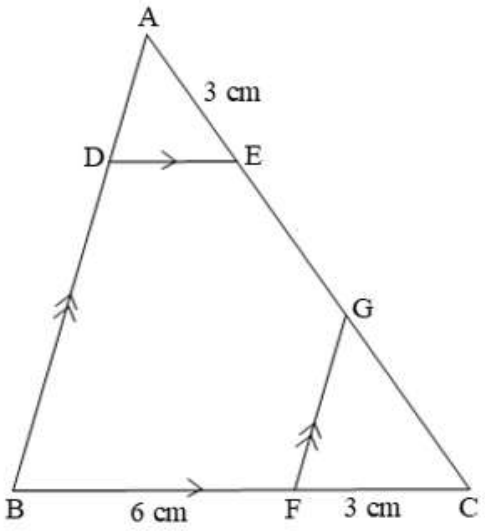
8.2




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 8.2.1 | | (6) |
| 8.2.2 | | (2) |
| 8.2.3 | | (1) |
| | | **[16]** |

## QUESTION/*VRAAG* 9

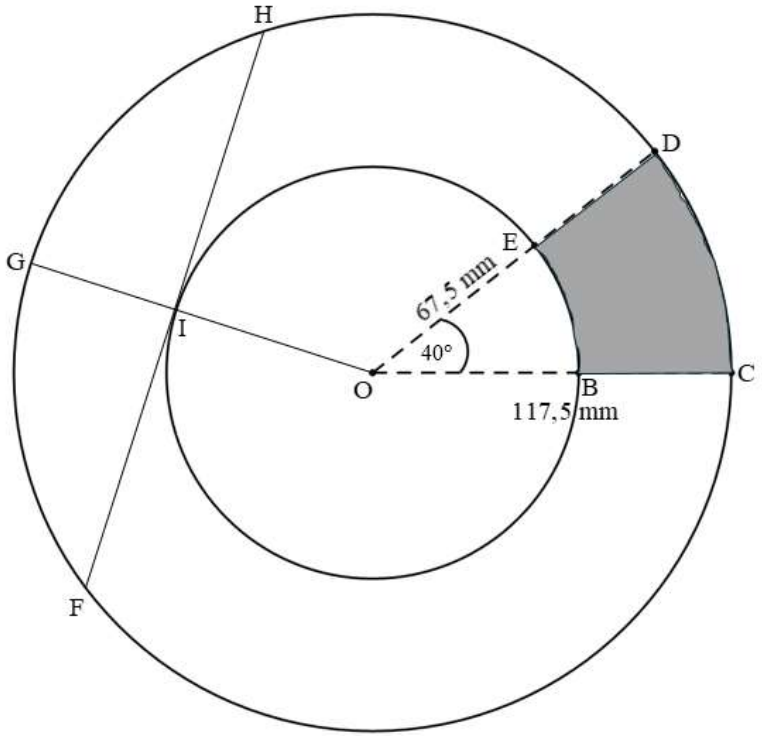
9.1




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 9.1 | | (4) |
| 9.2 | | (3) |
| 9.3 | | (3) |
| | | **[10]** |

**QUESTION/*VRAAG* 10**

10.1



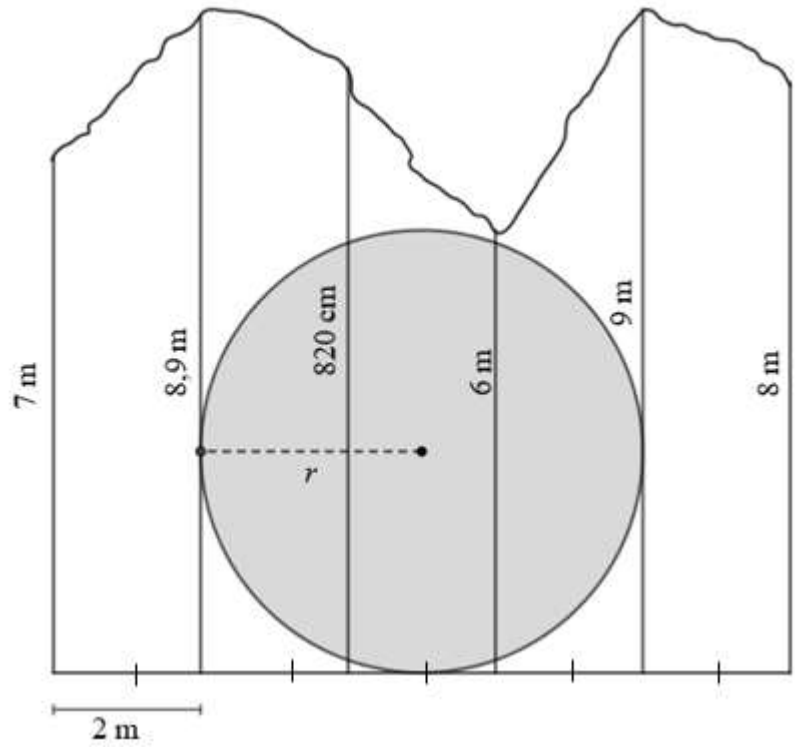

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 10.1.1 | | (1) |
| 10.1.2 | | (3) |
| 10.1.3 | | (3) |

| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 10.1.4 | | (4) |
| 10.1.5 | | (5) |

| | | |
|---|---|---|
| 10.2.1 | | (3) |
| 10.2.2 | | (3) |
| | | **[22]** |

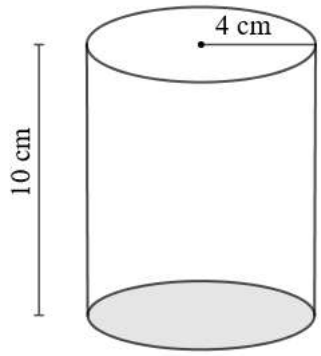
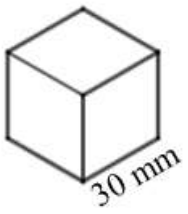
**QUESTION/*VRAAG* 11**

11.1




| | **Solution/*Oplossing*** | **Marks** ***Punte*** |
|---|---|---|
| 11.1.1 | | (1) |
| 11.1.2 | | (1) |
| 11.1.3 | | (1) |
| 11.1.4 | | (6) |

11.2

| Inner dimensions of the cylindrical glass / *Binne-afmetings van die silindriese glas* | Dimensions of one ice cube / *Afmetings van een ysblokkie* |
|---|---|
|   |   |

| | **Solution/*Oplossing*** | **Marks *Punte*** |
|---|---|---|
| 11.2.1 | | |
| | | (1) |
| 11.2.2 | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | (6) |
| | | **[16]** |

**TOTAL/*TOTAAL*: 150**

*Copyright reserved/Kopiereg voorbehou*

| | **Additional space/*Bykomende ruimte*** | **Marks** ***Punte*** |
|---|---|---|
| | | |

| | **Additional space/*Bykomende ruimte*** | **Marks** ***Punte*** |
|---|---|---|
| | | |

*Copyright reserved/Kopiereg voorbehou*

| **RE-MARK/RE-CHECK/ *HERNASIEN/HERKONTROLEER*** | | | | |
|---|---|---|---|---|
| **Question** ***Vraag*** | **Marks/*Punte*** | | | **Initials/*Paraaf*** |
| **1** | | | | |
| **2** | | | | |
| **3** | | | | |
| **4** | | | | |
| **5** | | | | |
| **6** | | | | |
| **7** | | | | |
| **8** | | | | |
| **9** | | | | |
| **10** | | | | |
| **11** | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **TOTAL** ***TOTAAL*** | | | | |
| **HASH TOTAL** ***KAFTOTAAL*** | | | | |

*Copyright reserved/Kopiereg voorbehou*