



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) 2022

CENTRE NUMBER
SENTRUMNUMMER

EXAMINATION NUMBER
EKSAMENNUMMER

DATE
DATUM

BOOK NUMBER
BOEKNOMMER

OF
VAN

BOOKS
BOEKE

SUBJECT CODE
VAKKODE

PAPER NUMBER
VRAESTELNUMMER

2

SUBJECT NAME
VAKNAAM

MATHEMATICS/WISKUNDE

MARKER/NASIENER			MODERATOR'S INITIALS IN RELEVANT BLOCK MODERATOR SE VOORLETTERS IN RELEVANTE BLOKKIE									
Question Vraag	Marks Punte	Marker's Code & Initials Nasiener se kode & Voorletters	Marks Punte	SM	Marks Punte	DCM AHN	Marks Punte	CM HN	Marks Punte	IM	Marks Punte	EM
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
		TOTAL TOTAAL										

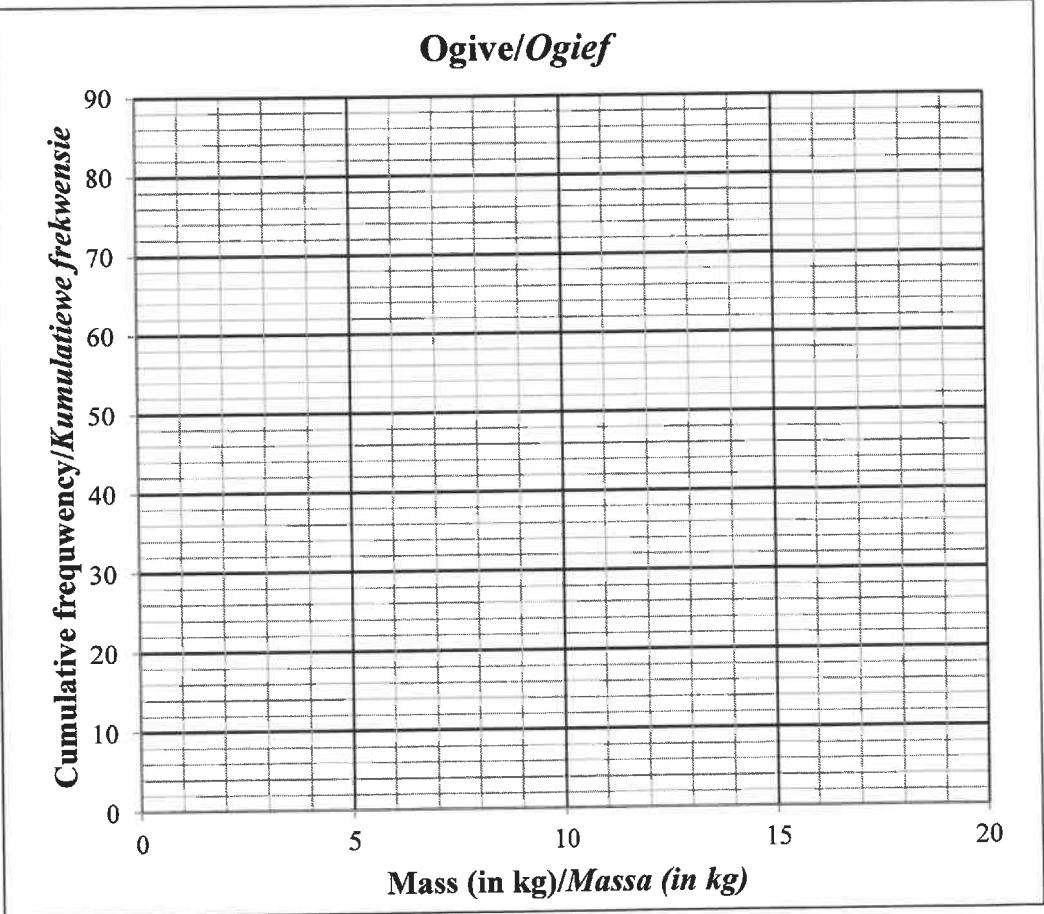
CONTROLLED AND CERTIFIED CORRECT
(SURNAME AND INITIALS OF EA)
GEKONTROLEER EN AS KORREK
GESERTIFISEER (VAN EN VOORLETTERS
VAN EA)

READ INSTRUCTIONS ON THE NEXT PAGE.
LEES INSTRUKSIES OP VOLGENDE BLADSY.

This answer book consists of 23 pages./Hierdie antwoordeboek bestaan uit 23 bladsye.

PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY	VOLG ASSEBLIEF HIERDIE INSTRUKSIES NOUKEURIG
1. Clearly write your examination number and centre number in the space provided and attach your barcode label in the space provided.	1. <i>Skryf jou eksamennommer en sentrumnummer duidelik in die ruimtes verskaf en plak jou stafieskodeplakker in die ruimte verskaf.</i>
2. Remember that your own name (or the name of your school) may NOT appear anywhere on or in this answer book.	2. <i>Onthou dat jou eie naam (of die naam van jou skool) NIE op of in hierdie antwoordeboek mag voorkom NIE.</i>
3. Answer ALL questions in the spaces provided.	3. <i>Beantwoord ALLE vrae in die ruimtes wat verskaf is.</i>
4. NO pages may be torn from this answer book.	4. <i>GEEN bladsye mag uit hierdie antwoordeboek geskeur word NIE.</i>
5. Read the instructions printed on your timetable carefully as well as any other instructions which may be given in each question paper.	5. <i>Lees die instruksies, wat op jou eksamenrooster gedruk is, sorgvuldig deur, asook enige ander instruksies wat op elke vraestel gegee word.</i>
6. Candidates may NOT retain an answer book or remove it from the examination room.	6. <i>GEEN antwoordeboek mag deur die kandidaat behou of uit die eksamenlokaal verwyder word NIE.</i>
7. Answers must be written in black/blue ink as distinctly as possible. Do NOT write in the margins.	7. <i>Skryf die antwoorde so duidelik moontlik met swart/blou ink. Laat die kantlyne oop.</i>
8. Write the numbers of the questions you have answered on the front cover of the answer book where marks are to be recorded.	8. <i>Skryf die nommers van die vrae wat jy beantwoord het op die voorblad van die antwoordeboek waar die punte aangebring word.</i>
9. If you require additional space for your answers: 9.1 Use the additional space provided at the end of the answer book. 9.2 When answering a question in the additional space, clearly indicate the question number in the column on the LHS. 9.3 Rule off after each answer.	9. <i>In geval jy bykomende ruimte benodig vir jou antwoorde:</i> 9.1 <i>Gebruik die bykomende ruimte wat aan die einde van die antwoordeboek verskaf word.</i> 9.2 <i>As 'n vraag in die bykomende ruimte beantwoord word, dui duidelik die vraagnommer in die kolom aan die LK aan.</i> 9.3 <i>Trek 'n lyn na elke antwoord.</i>
10. Draw a neat line through any work/rough work that must not be marked.	10. <i>Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie.</i>

QUESTION/VRAAG 1

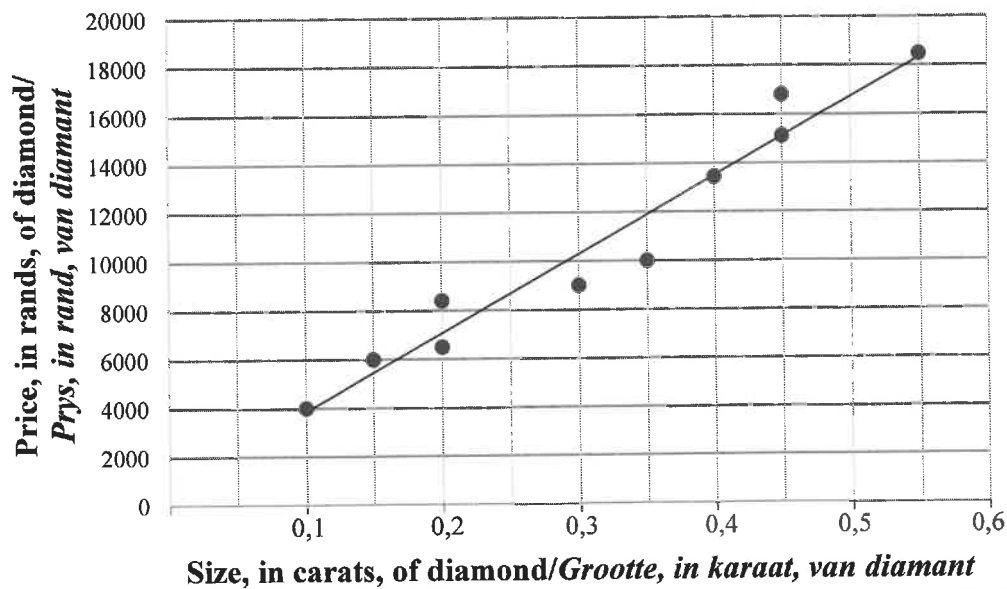
	Solution/Oplissing	Marks Punte																								
1.1		(1)																								
1.2	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th data-bbox="400 533 667 678">MASS (in kg)/ MASSA (in kg)</th> <th data-bbox="667 533 933 678">FREQUENCY/ FREKWENSIE</th> <th data-bbox="933 533 1219 678">CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE</th> </tr> </thead> <tbody> <tr> <td data-bbox="400 678 667 734">$5 < m \leq 7$</td> <td data-bbox="667 678 933 734">6</td> <td data-bbox="933 678 1219 734"></td> </tr> <tr> <td data-bbox="400 734 667 790">$7 < m \leq 9$</td> <td data-bbox="667 734 933 790">18</td> <td data-bbox="933 734 1219 790"></td> </tr> <tr> <td data-bbox="400 790 667 846">$9 < m \leq 11$</td> <td data-bbox="667 790 933 846">21</td> <td data-bbox="933 790 1219 846"></td> </tr> <tr> <td data-bbox="400 846 667 902">$11 < m \leq 13$</td> <td data-bbox="667 846 933 902">19</td> <td data-bbox="933 846 1219 902"></td> </tr> <tr> <td data-bbox="400 902 667 958">$13 < m \leq 15$</td> <td data-bbox="667 902 933 958">11</td> <td data-bbox="933 902 1219 958"></td> </tr> <tr> <td data-bbox="400 958 667 1014">$15 < m \leq 17$</td> <td data-bbox="667 958 933 1014">4</td> <td data-bbox="933 958 1219 1014"></td> </tr> <tr> <td data-bbox="400 1014 667 1093">$17 < m \leq 19$</td> <td data-bbox="667 1014 933 1093">1</td> <td data-bbox="933 1014 1219 1093"></td> </tr> </tbody> </table>	MASS (in kg)/ MASSA (in kg)	FREQUENCY/ FREKWENSIE	CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE	$5 < m \leq 7$	6		$7 < m \leq 9$	18		$9 < m \leq 11$	21		$11 < m \leq 13$	19		$13 < m \leq 15$	11		$15 < m \leq 17$	4		$17 < m \leq 19$	1		(2)
MASS (in kg)/ MASSA (in kg)	FREQUENCY/ FREKWENSIE	CUMULATIVE FREQUENCY/ KUMULATIEWE FREKWENSIE																								
$5 < m \leq 7$	6																									
$7 < m \leq 9$	18																									
$9 < m \leq 11$	21																									
$11 < m \leq 13$	19																									
$13 < m \leq 15$	11																									
$15 < m \leq 17$	4																									
$17 < m \leq 19$	1																									
1.3	<p style="text-align: center;">Ogive/Ogief</p> 	(3)																								

	Solution/Oplissing	Marks Punte
1.4		(2)
1.5.1		(2)
1.5.2		(2)
		[12]

QUESTION/VRAAG 2

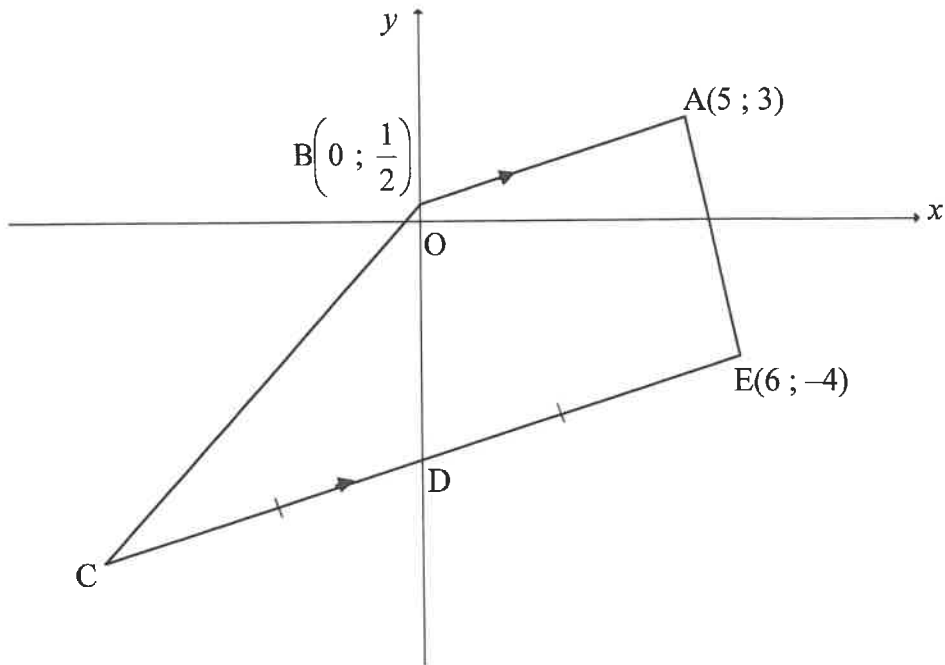
Size, in carats, of diamond (x)/ Grootte, in karaat, van diamant (x)	0,1	0,15	0,2	0,2	0,3	0,35	0,4	0,45	0,45	0,55
Price, in rands, of diamond (y)/ Prys, in rand, van diamant (y)	4 000	6 000	6 500	8 400	9 000	10 000	13 440	15 120	16 800	18 480

SCATTER PLOT / SPREIDIAGRAM



	Solution/Oplissing	Marks Punte
2.1		(3)
2.2		(2)
2.3		(2)
2.4		(1)
		[8]

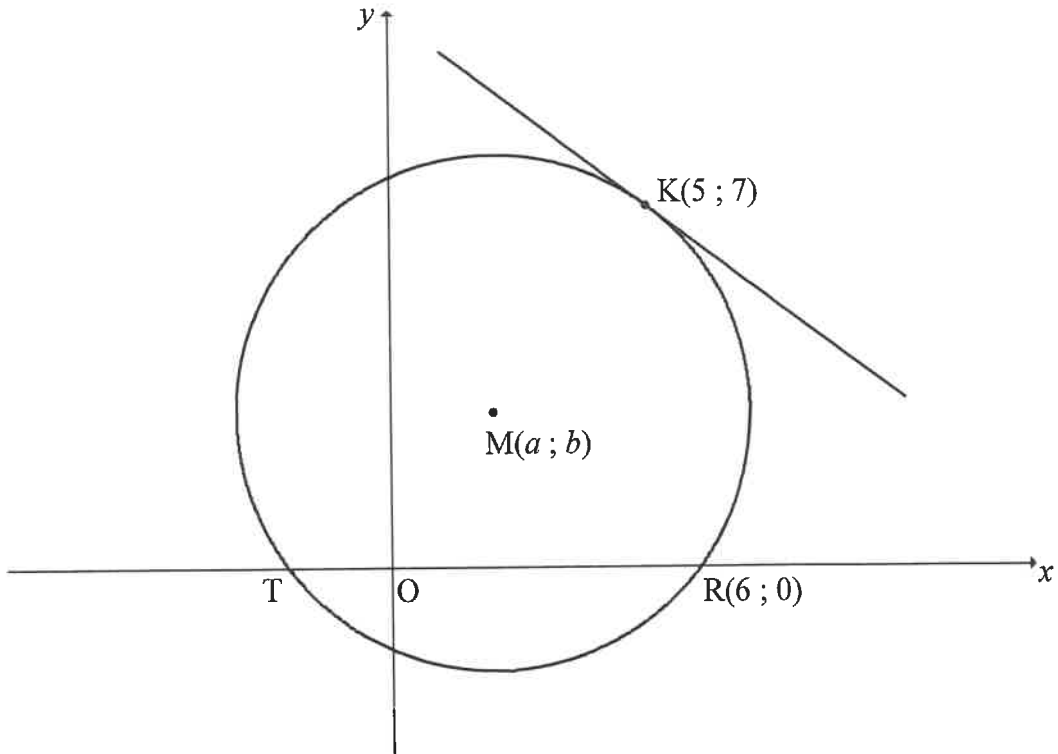
QUESTION/VRAAG 3



	Solution/Oplissing	Marks Punte
3.1		(2)
3.2		(3)
3.3.1		(3)

	Solution/Oplissing	Marks Punte
3.3.2		(4)
3.4.1		(2)
3.4.2(a)		(4)
3.4.2(b)		(3)
		[21]

QUESTION/VRAAG 4

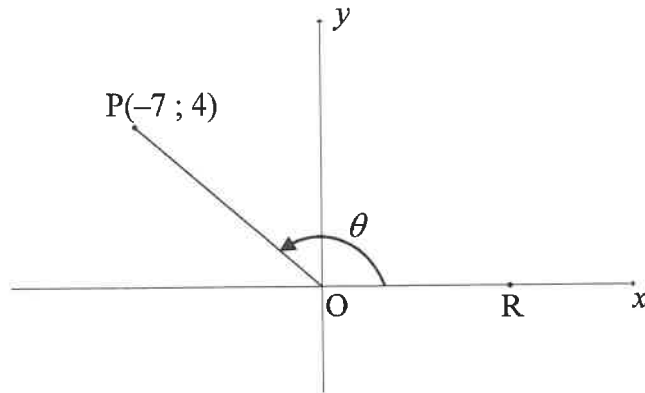


	Solution/Oplissing	Marks Punte
4.1.1		(1)
4.1.2		
		(5)

	Solution/Oplissing	Marks Punte
4.2.1		(2)
4.2.2		(2)
4.3		(5)
4.4.1		(2)
4.4.2		(3)
		[20]

QUESTION/VRAAG 5

5.1



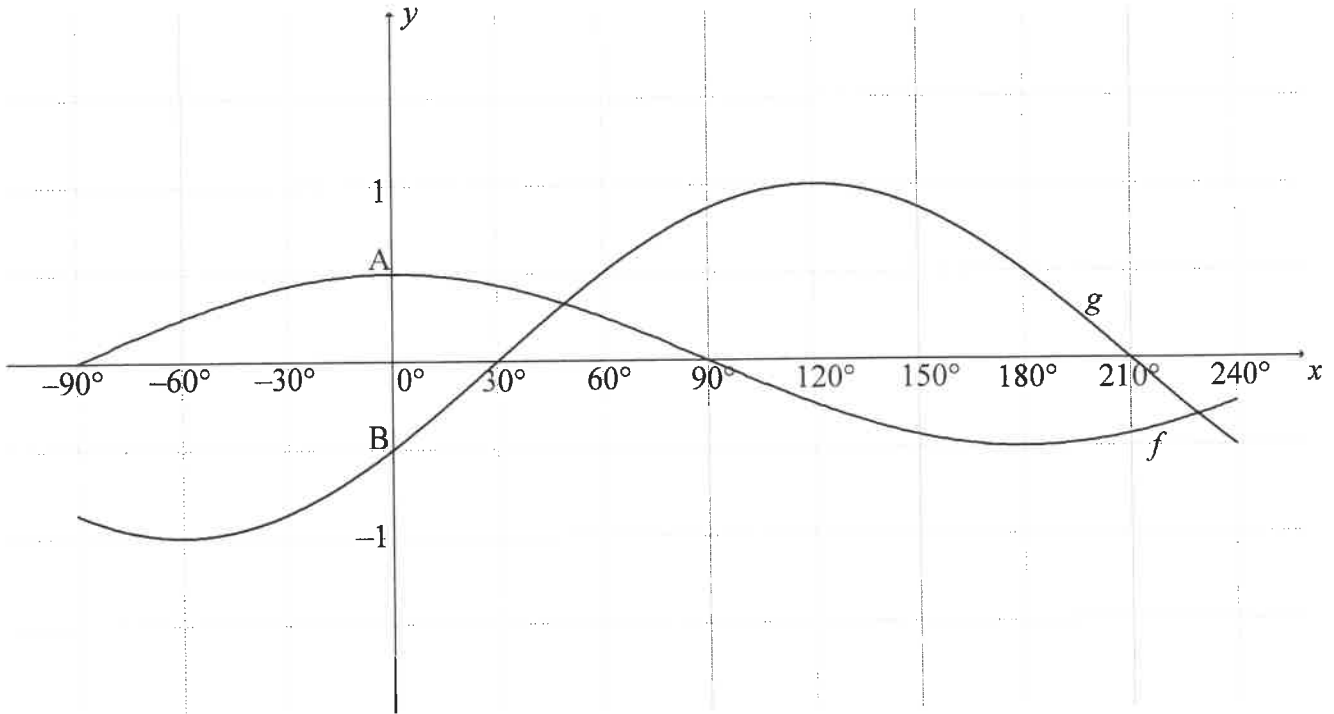
	Solution/Oplissing	Marks Punte
5.1.1		(2)
5.1.2(a)		(1)
5.1.2(b)		(2)
5.2		(7)

	Solution/Oplissing	Marks Punte
5.3.1		(3)
5.3.2		(3)
		[18]

QUESTION/VRAAG 6

	Solution/Oplissing	Marks Punte
6.1		(6)
6.2.1		(3)
6.2.2		(3)
		[12]

QUESTION/VRAAG 7



	Solution/Oplissing	Marks Punte
7.1		(2)
7.2		(2)
7.3		(2)
7.4.1		(2)
7.4.2		(2)
		[10]

QUESTION/VRAAG 8

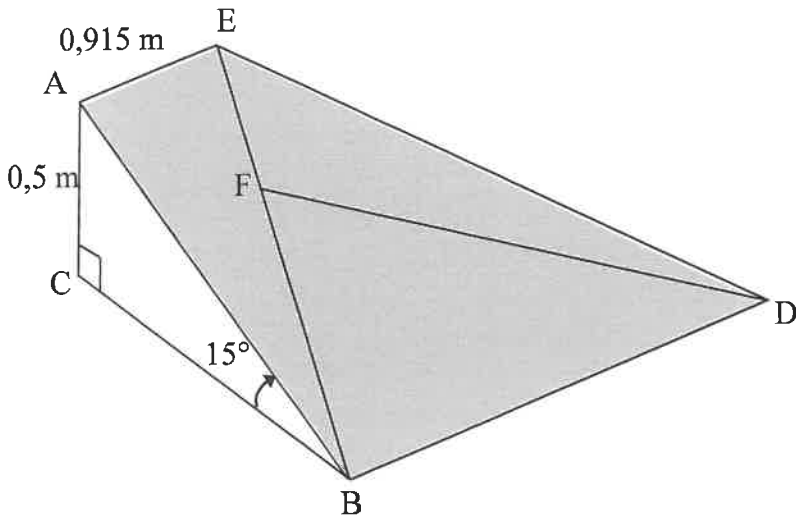


FIGURE I/FIGUUR I

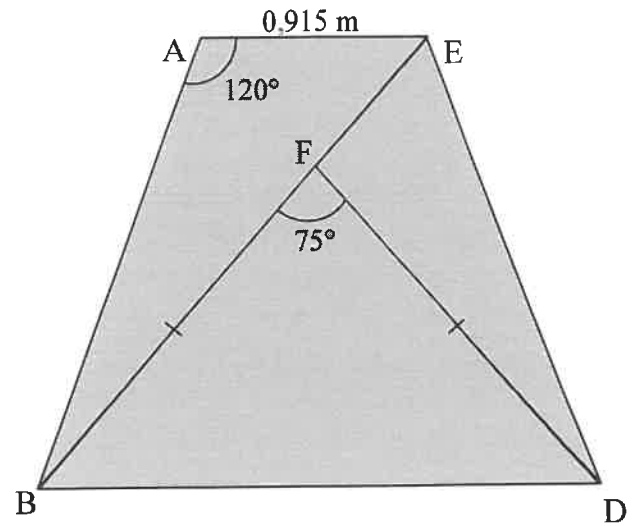


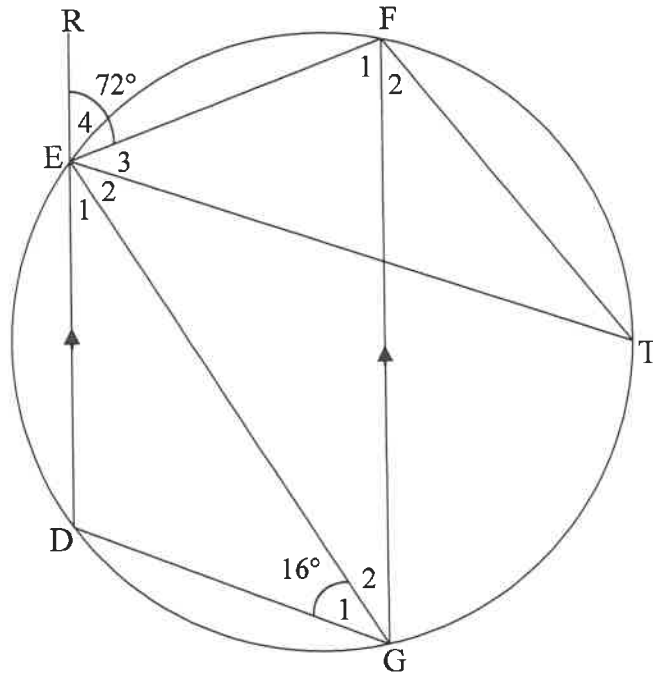
FIGURE II (top view)/FIGUUR II (boaansig)

	Solution/Oplissing	Marks Punte
8.1		(2)
8.2		(3)
8.3		(3)
		[8]

Give reasons for your statements in QUESTIONS 9 en 10.
 Gee redes vir jou bewerings in VRAAG 9 en 10.

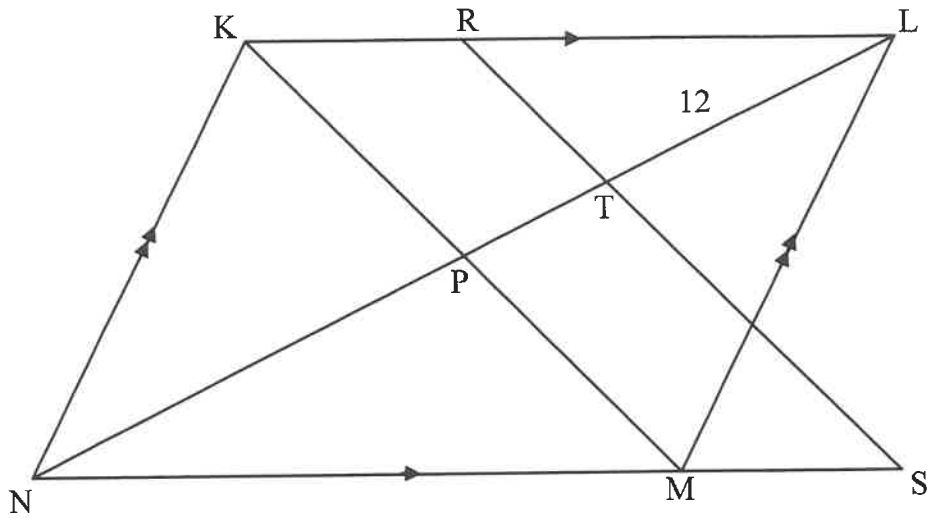
QUESTION/VRAAG 9

9.1



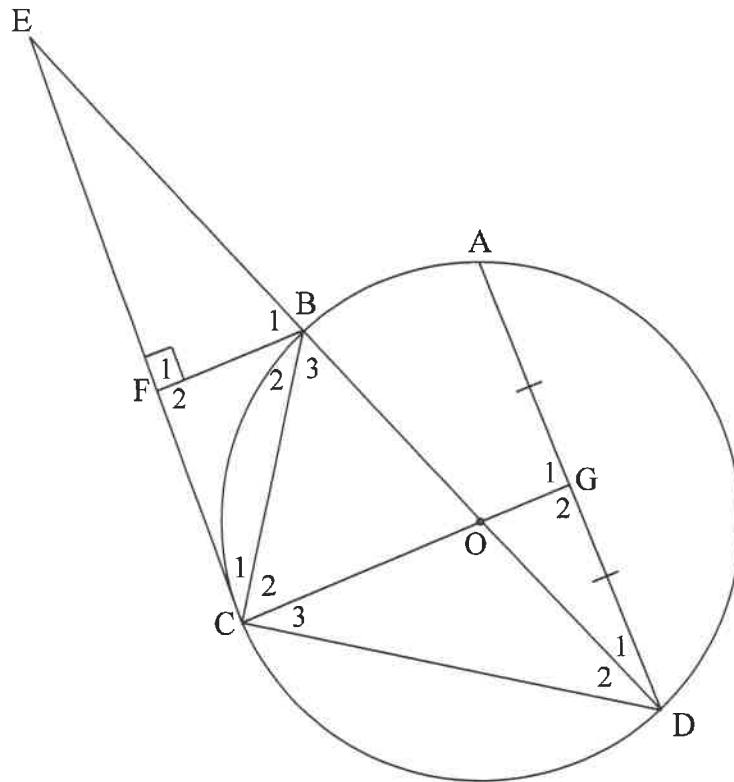
	Solution/Oplissing	Marks Punte
9.1.1		(2)
9.1.2		(2)
9.1.3		(2)

9.2



	Solution/Oplissing	Marks Punte
9.2.1		(4)
9.2.2		(2)
9.2.3		(4)
		[16]

10.2



	Solution/Oplissing	Marks Punte
10.2.1(a)		
		(3)

	Solution/Oplissing	Marks Punte
10.2.1(b)		(5)
10.2.2		(1)
10.2.3		(5)
10.2.4		(5)
		[25]

RE-MARK/RE-CHECK HERMERK/HERSIEN				
Question Vraag	Marks Punte			Initials Voorletters
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
TOTAL TOTAAL				
HASH TOTAL KAF- TOTAAL				