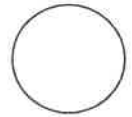**basic education**

Department.
Basic Education
REPUBLIC OF SOUTH AFRICA

Candidate Barcode label/*Stafieskodeplakker*

NSC Answer Book
NSS Antwoordeboek

National Senior Certificate/*Nasionale Senior Sertifikaat* (Grade 12/*Graad 12*)

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*	**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 24 pages./*Hierdie antwoordeboek bestaan uit 24 bladsye.*

Please turn over/*Blaai om asseblief*

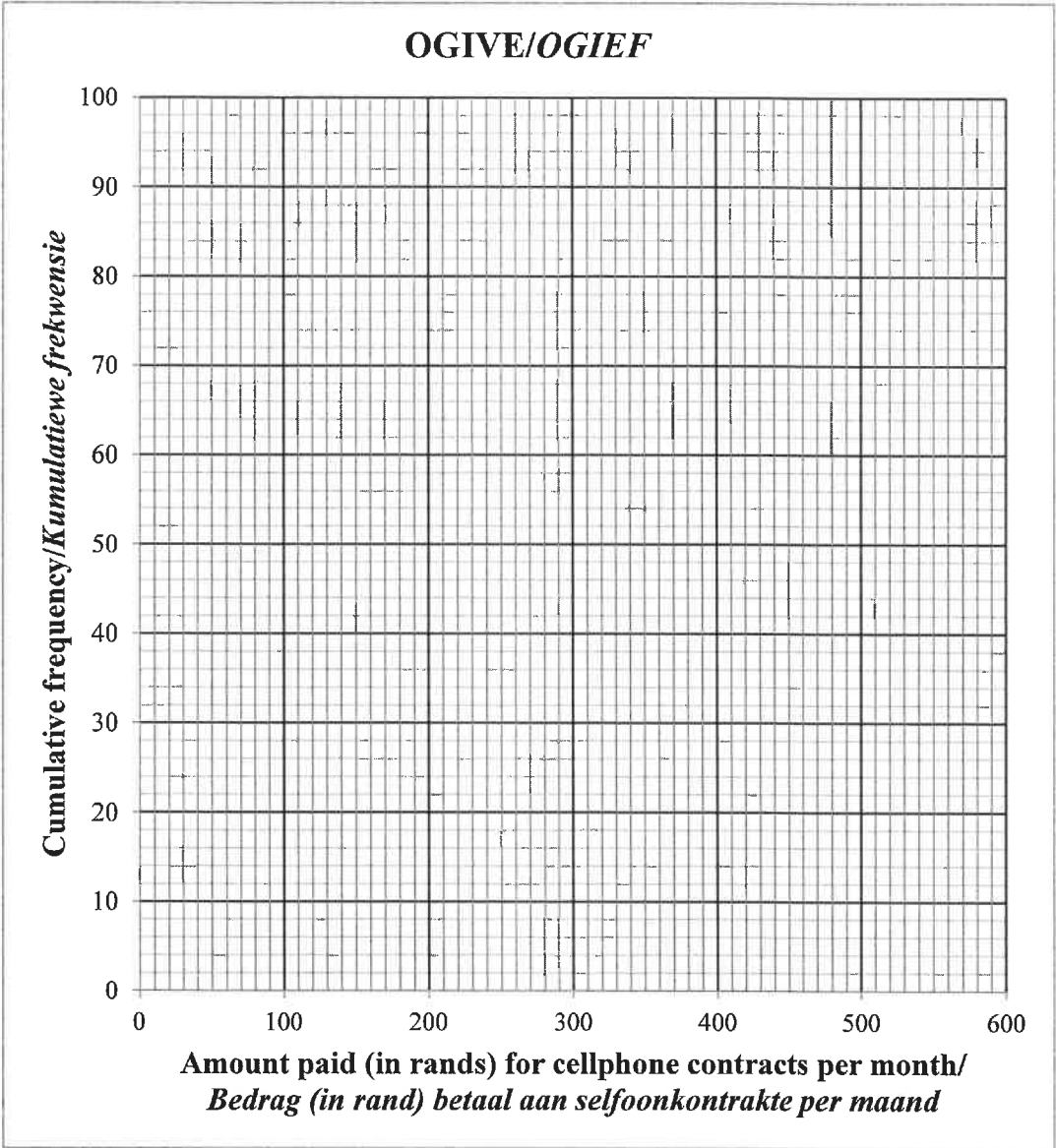| FOLLOW THESE INSTRUCTIONS CAREFULLY	*VOLG HIERDIE INSTRUKSIES NOUKEURIG*
1. Clearly write your examination number and centre number in the space provided and attach your barcode label in the space provided.	*1. Skryf jou eksamennommer en sentrumnommer duidelik in die ruimtes verskaf en plak jou stafieskodeplakker 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 vraestel gegee word.*
6. Candidates may not retain an answer book or remove it from the examination room.	*6. GEEN antwoordeboek mag deur die kandidaat behou of uit die eksamenlokaal verwyder word NIE.*
7. Answers must be written 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. Laat die kantlyne oop.*
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. Skryf die nommers van die vrae wat jy beantwoord het op die voorblad van die antwoordeboek waar die punte aangebring word.*
9. If you require additional space for your answers:	*9. In geval jy bykomende ruimte benodig vir jou antwoorde:*
9.1 Use the additional space provided at the end of the answer book.	*9.1 Gebruik die bykomende ruimte wat aan die einde van die antwoordeboek verskaf word.*
9.2 When answering a question in the additional space, indicate clearly the question number in the column on the LHS.	*9.2 As 'n vraag in die bykomende ruimte beantwoord word, dui duidelik die vraagnommer in die kolom aan die LK aan.*
9.3 Rule off after each answer.	*9.3 Trek 'n lyn na elke antwoord.*
10. Draw a neat line through any work/rough work that must not be marked.	*10. Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie.*

QUESTION/*VRAAG* 1

MONTHLY INCOME (IN RANDS) MAANDELIKSE INKOMSTE (IN RAND)	9 000	13 500	15 000	16 500	17 000	20 000
MONTHLY REPAYMENT (IN RANDS) MAANDELIKSE PAAIEMENT (IN RAND)	2 000	3 000	3 500	5 200	5 500	6 000

	Solution/*Oplossing*	Marks *Punte*
1.1		(3)
1.2		(2)
1.3		(1)
1.4		(2)
		[8]

QUESTION/*VRAAG* 2

AMOUNT PAID (IN RANDS) BEDRAG BETAAL (IN RAND)	FREQUENCY FREKWENSIE
$0 < x \leq 100$	7
$100 < x \leq 200$	12
$200 < x \leq 300$	a
$300 < x \leq 400$	35
$400 < x \leq 500$	b
$500 < x \leq 600$	6

	Solution/*Oplossing*	Marks *Punte*
2.1		(1)
2.2		(5)
2.3		(1)

	Solution/*Oplossing*	Marks *Punte*
2.4	**OGIVE/*OGIEF*** Cumulative frequency/*Kumulatiewe frekwensie* (y-axis) Amount paid (in rands) for cellphone contracts per month/ *Bedrag (in rand) betaal aan selfoonkontrakte per maand* (x-axis)	(4)
2.5		(2)
		[13]

QUESTION/*VRAAG* 3
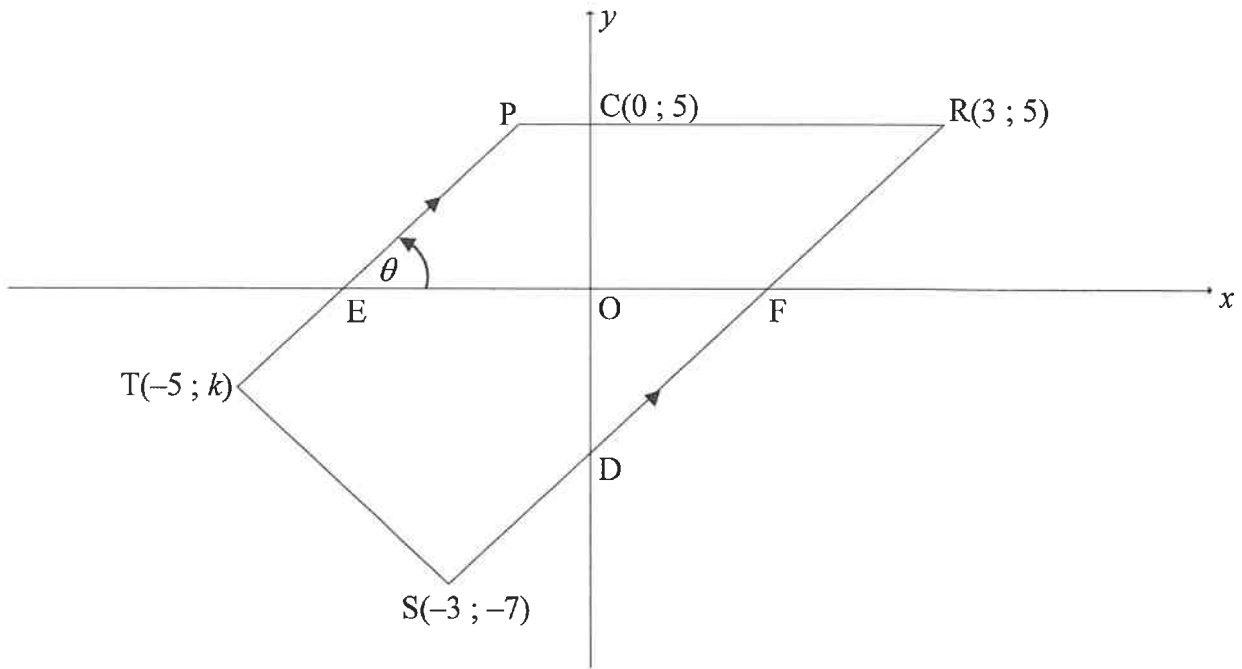
	Solution/*Oplossing*	Marks *Punte*
3.1		(1)
3.2.1		(2)
3.2.2		(3)

	Solution/*Oplossing*	Marks *Punte*
3.2.3		(3)
3.3		(4)
3.4		(3)
3.5		(3)
		[19]

QUESTION/*VRAAG* 4

	Solution/*Oplossing*	Marks *Punte*
4.1		(3)
4.2		(2)

	Solution/*Oplossing*	Marks *Punte*
4.3		(4)
4.4		(3)
4.5		(3)
4.6		(5)
		[20]

QUESTION/*VRAAG* 5

	Solution/*Oplossing*	Marks *Punte*
5.1		(5)
5.2		(4)
5.3		(4)

	Solution/*Oplossing*	Marks *Punte*
5.4.1		(6)
5.4.2		(3)
		[22]

QUESTION/*VRAAG* 6
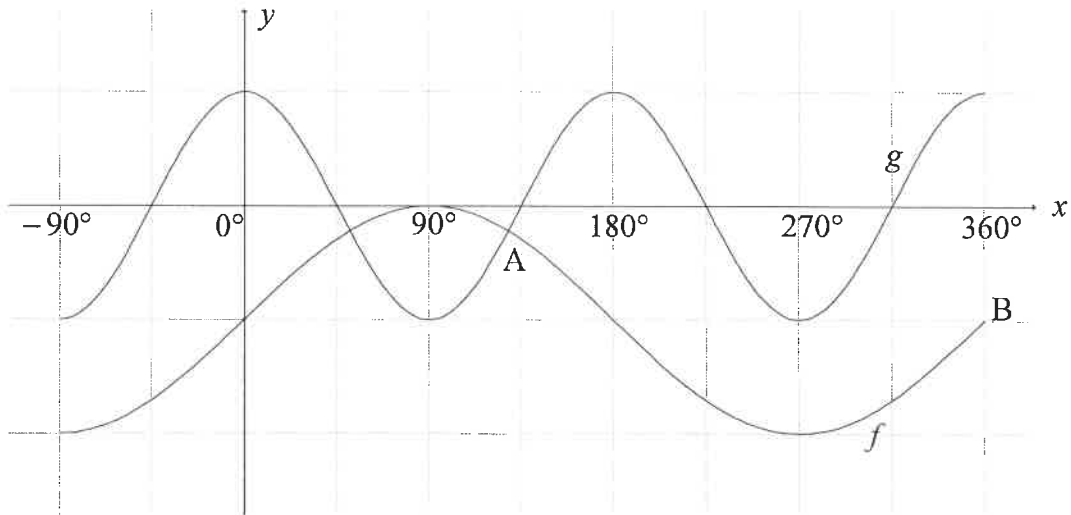
	Solution/*Oplossing*	Marks *Punte*
6.1		(2)
6.2		(2)
6.3		(6)
		[10]

QUESTION/*VRAAG* 7
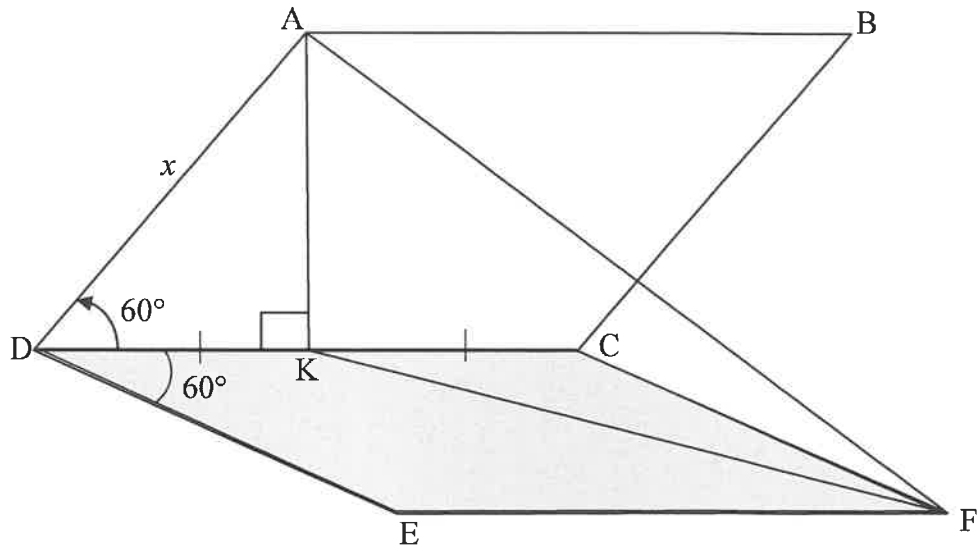
	Solution/*Oplossing*	Marks *Punte*
7.1		(2)
7.2		(1)
7.3		(7)
		[10]

Give reasons for your statements in QUESTIONS 8, 9 and 10.
Gee redes vir jou bewerings in VRAAG 8, 9 en 10.
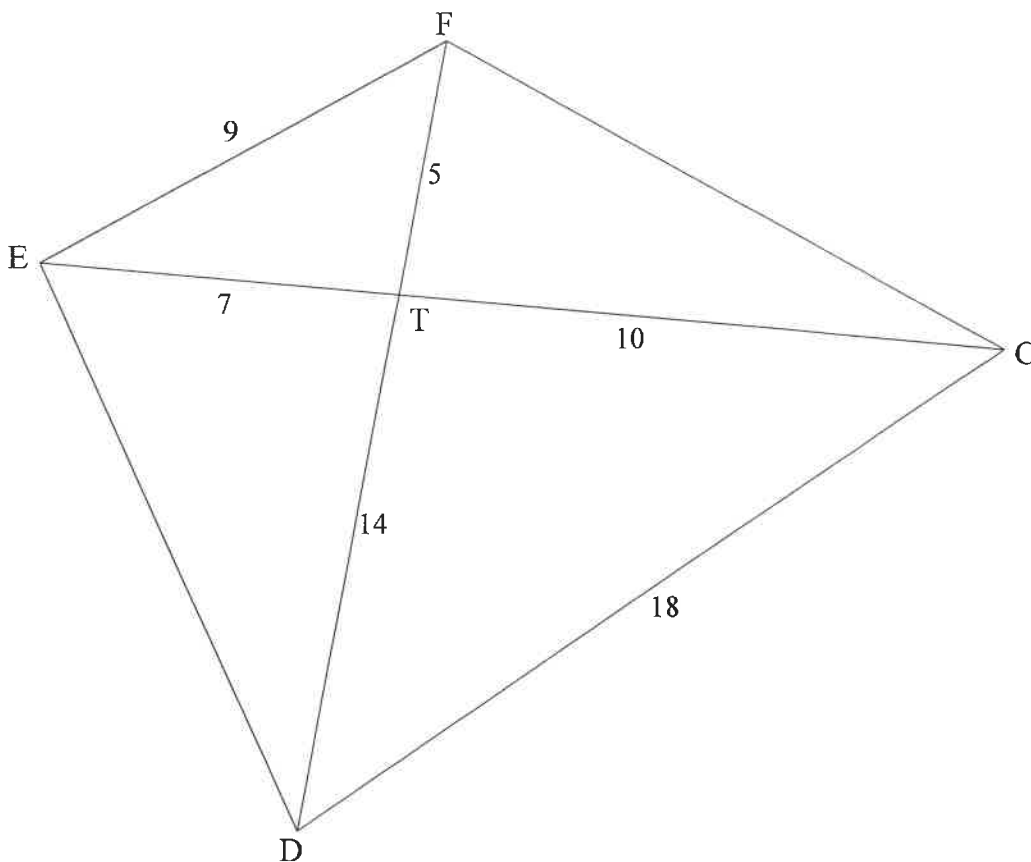
QUESTION/*VRAAG* 8

8.1
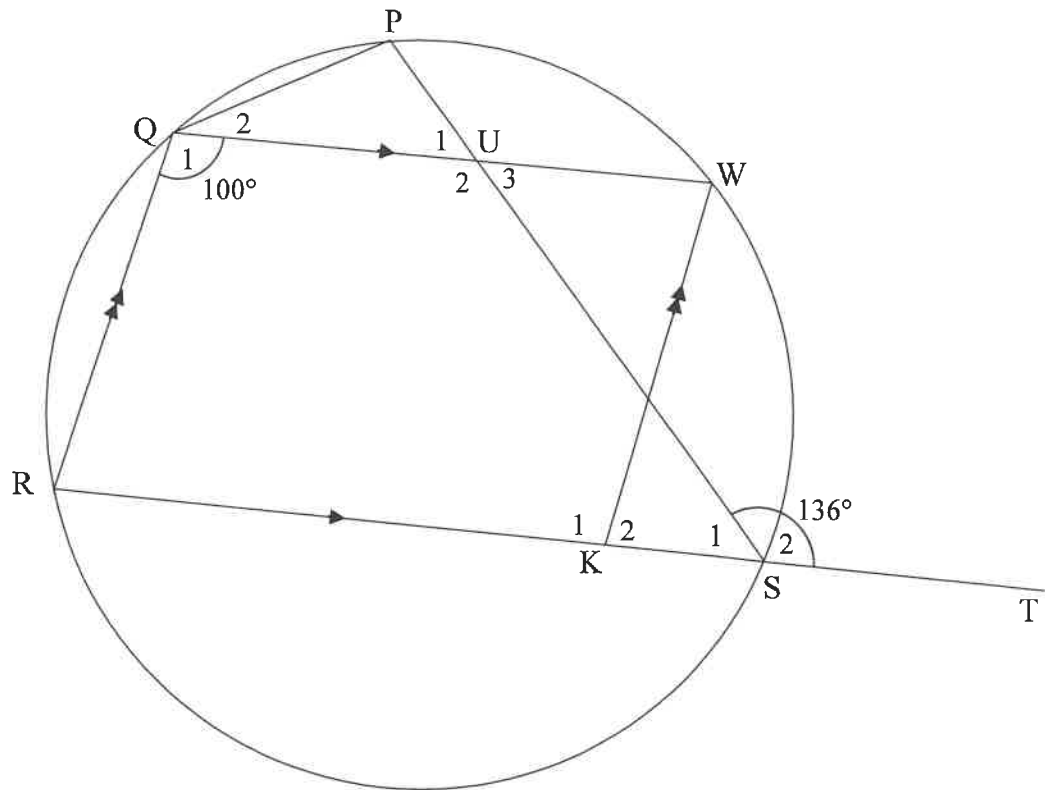
	Solution/*Oplossing*	Marks *Punte*
8.1.1		
		(2)
8.1.2		
		(2)

	Solution/*Oplossing*	Marks *Punte*
8.1.3		(3)
8.1.4		(2)

8.2

	Solution/*Oplossing*	Marks *Punte*
8.2.1		
		(4)

	Solution/*Oplossing*	Marks *Punte*
8.2.2		
		(3)
		[16]

QUESTION/*VRAAG* 9

	Solution/*Oplossing*	Marks *Punte*

[7]

QUESTION/*VRAAG* 10

10.1

	Solution/*Oplossing*	Marks *Punte*
		(6)

10.2
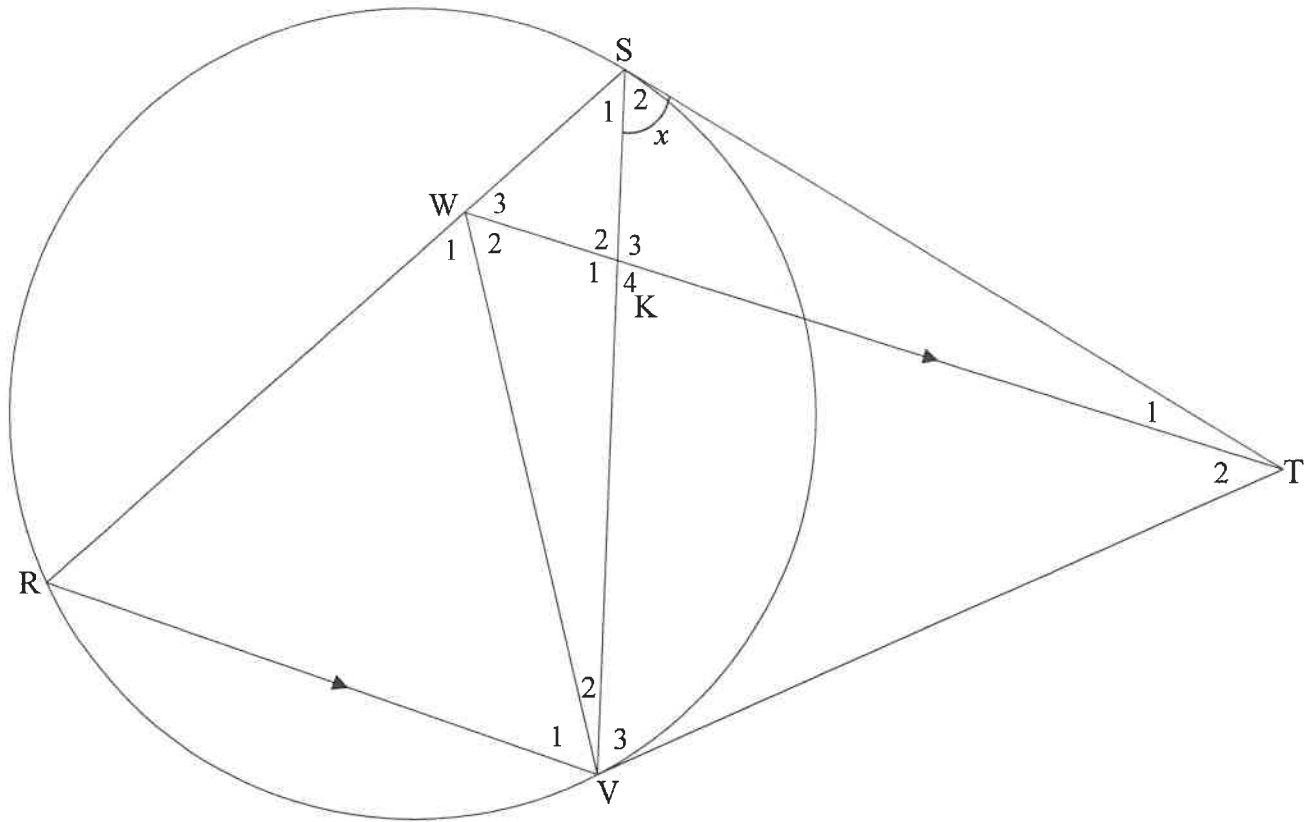
	Solution/*Oplossing*	Marks *Punte*
10.2.1		(6)
10.2.2(a)		(2)

10.2.2(b)

(4)

10.2.2(c)

(3)

10.2.2(d)

(4)

[25]

Additional space/*Bykomende ruimte*	Marks *Punte*

Additional space/*Bykomende ruimte*	Marks *Punte*

TOTAL/*TOTAAL*: 150

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*				