



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)***

<b>CENTRE NUMBER</b> <i>SENTRUMNOMMER</i>						
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[illegible]

<b>DATE</b> <i>DATUM</i>	
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BOOK NUMBER <i>BOEKNUMMER</i>		OF <i>VAN</i>		BOOKS <i>BOEKE</i>
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<b>SUBJECT CODE</b> <i>VAKKODE</i>					
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PAPER NUMBER VRAESTELNOMMER	2
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SUBJECT NAME VAKNAAM	MATHEMATICS/ <i>WISKUNDE</i>
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[illegible]

**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 25 pages./Hierdie antwoordeboek bestaan uit 25 bladsye.**

PLEASE FOLLOW THESE INSTRUCTIONS CAREFULLY	VOLG ASSEBLIEF HIERDIE INSTRUKSIES NOUKEURIG
<ol style="list-style-type: none"> <li>Clearly write your examination number and centre number in the space provided and attach your barcode label in the space provided.</li> <li>Remember that your own name (or the name of your school) may NOT appear anywhere on or in this answer book.</li> <li>Answer ALL questions in the spaces provided.</li> <li>NO pages may be torn from this answer book.</li> <li>Read the instructions printed on your timetable carefully as well as any other instructions which may be given in each question paper.</li> <li>Candidates may NOT retain an answer book or remove it from the examination room.</li> <li>Answers must be written in black/blue ink as distinctly as possible. Do NOT write in the margins.</li> <li>Write the numbers of the questions you have answered on the front cover of the answer book where marks are to be recorded.</li> <li>If you require additional space for your answers: <ol style="list-style-type: none"> <li>Use the additional space provided at the end of the answer book.</li> <li>When answering a question in the additional space, clearly indicate the question number in the column on the LHS.</li> <li>Rule off after each answer.</li> </ol> </li> <li>Draw a neat line through any work/rough work that must not be marked.</li> </ol>	<ol style="list-style-type: none"> <li><i>Skryf jou eksamennommer en sentrumnummer duidelik in die ruimtes verskaf en plak jou stafieskodeplakker in die ruimte verskaf.</i></li> <li><i>Onthou dat jou eie naam (of die naam van jou skool) NIE op of in hierdie antwoordeboek mag voorkom NIE.</i></li> <li><i>Beantwoord ALLE vrae in die ruimtes wat verskaf is.</i></li> <li><i>GEEN bladsye mag uit hierdie antwoordeboek geskeur word NIE.</i></li> <li><i>Lees die instruksies, wat op jou eksamenrooster gedruk is, sorgvuldig deur, asook enige ander instruksies wat op elke vraestel gegee word.</i></li> <li><i>GEEN antwoordeboek mag deur die kandidaat behou of uit die eksamenlokaal verwyder word NIE.</i></li> <li><i>Skryf die antwoorde so duidelik moontlik met swart/blou ink. Laat die kantlyne oop.</i></li> <li><i>Skryf die nommers van die vrae wat jy beantwoord het op die voorblad van die antwoordeboek waar die punte aangebring word.</i></li> <li><i>In geval jy bykomende ruimte benodig vir jou antwoorde:</i> <ol style="list-style-type: none"> <li><i>Gebruik die bykomende ruimte wat aan die einde van die antwoordeboek verskaf word.</i></li> <li><i>As 'n vraag in die bykomende ruimte beantwoord word, dui duidelik die vraagnommer in die kolom aan die LK aan.</i></li> <li><i>Trek 'n lyn na elke antwoord.</i></li> </ol> </li> <li><i>Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie.</i></li> </ol>

**QUESTION/VRAAG 1**

<b>TIME TAKEN (<math>t</math>) (IN MINUTES)/ <i>TYD GENEEM (<math>t</math>) (IN MINUTE)</i></b>	<b>NUMBER OF CHILDREN/ <i>GETAL KINDERS</i></b>
$2 < t \leq 6$	2
$6 < t \leq 10$	10
$10 < t \leq 14$	9
$14 < t \leq 18$	7
$18 < t \leq 22$	8
$22 < t \leq 26$	7
$26 < t \leq 30$	2

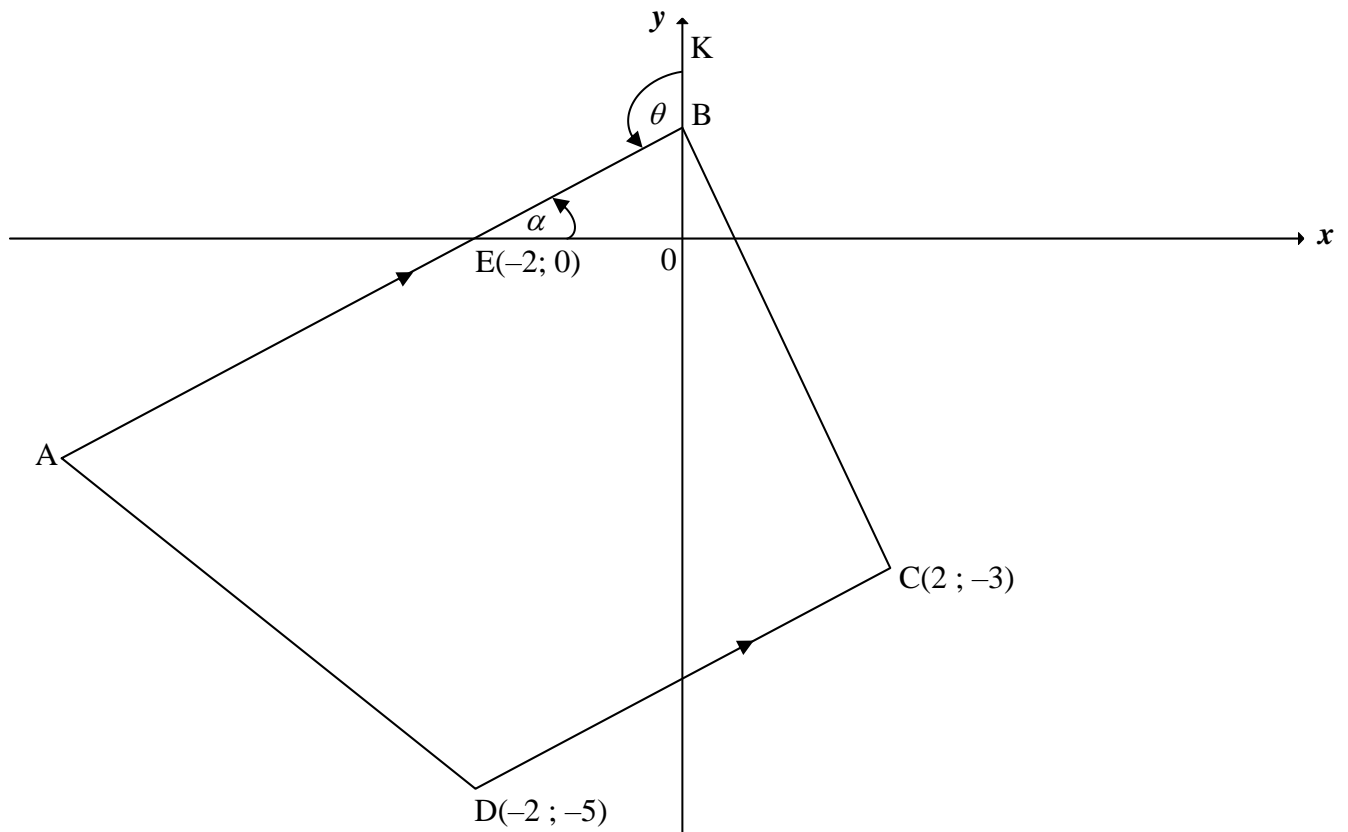
	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
1.1		(1)
1.2		(2)

1.3	<table><tr><th>Time in minutes (<i>t</i>) <i>Tyd in minute (t)</i></th><th>Number of children <i>Getal kinders</i></th><th>Cumulative frequency <i>Kumulatiewe frekwensie</i></th></tr><tr><td><math>2 &lt; t \leq 6</math></td><td>2</td><td></td></tr><tr><td><math>6 &lt; t \leq 10</math></td><td>10</td><td></td></tr><tr><td><math>10 &lt; t \leq 14</math></td><td>9</td><td></td></tr><tr><td><math>14 &lt; t \leq 18</math></td><td>7</td><td></td></tr><tr><td><math>18 &lt; t \leq 22</math></td><td>8</td><td></td></tr><tr><td><math>22 &lt; t \leq 26</math></td><td>7</td><td></td></tr><tr><td><math>26 &lt; t \leq 30</math></td><td>2</td><td></td></tr></table>	Time in minutes ( <i>t</i> ) <i>Tyd in minute (t)</i>	Number of children <i>Getal kinders</i>	Cumulative frequency <i>Kumulatiewe frekwensie</i>	$2 < t \leq 6$	2		$6 < t \leq 10$	10		$10 < t \leq 14$	9		$14 < t \leq 18$	7		$18 < t \leq 22$	8		$22 < t \leq 26$	7		$26 < t \leq 30$	2		(2)
Time in minutes ( <i>t</i> ) <i>Tyd in minute (t)</i>	Number of children <i>Getal kinders</i>	Cumulative frequency <i>Kumulatiewe frekwensie</i>																								
$2 < t \leq 6$	2																									
$6 < t \leq 10$	10																									
$10 < t \leq 14$	9																									
$14 < t \leq 18$	7																									
$18 < t \leq 22$	8																									
$22 < t \leq 26$	7																									
$26 < t \leq 30$	2																									
1.4	<div>CUMULATIVE FREQUENCY GRAPH (OGIVE) KUMULATIEWEFREKWENSIEGRAFIEK (OGIEF)</div> <div><div>Cumulative frequency Kumulatiewe frekwensie</div><div><div>50</div><div>40</div><div>30</div><div>20</div><div>10</div><div>0</div></div><div><div>0</div><div>5</div><div>10</div><div>15</div><div>20</div><div>25</div><div>30</div></div></div> <div>Time in minutes • <i>Tyd in minute</i></div>	(3)																								
1.5	<table><tr><td></td></tr><tr><td></td></tr><tr><td></td></tr></table>				(2)																					
[10]																										

**QUESTION/VRAAG 2**

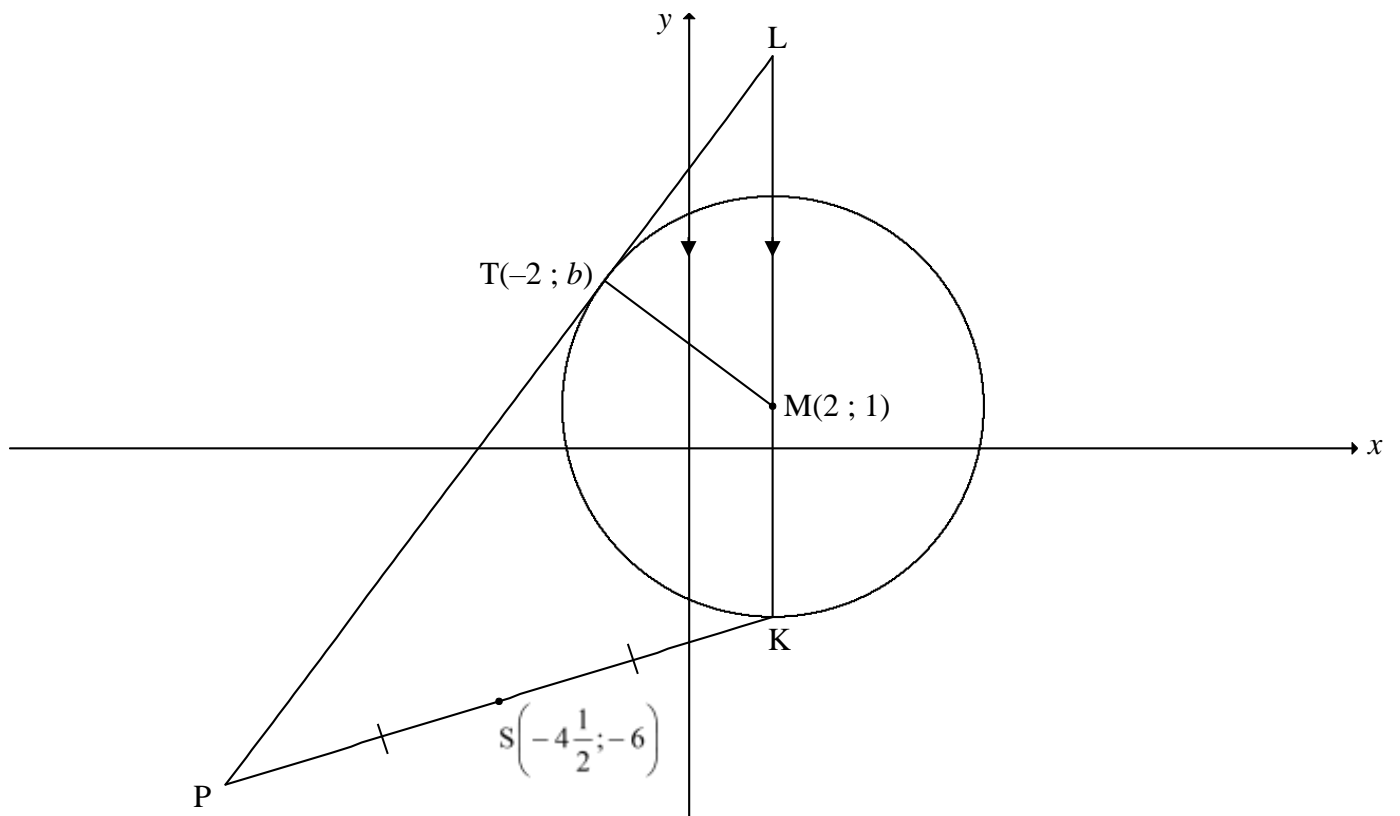
<b>LEARNER/ LEERDER</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>L4</b>	<b>L5</b>	<b>L6</b>	<b>L7</b>	<b>L8</b>	<b>L9</b>	<b>L10</b>	<b>L11</b>	<b>L12</b>	<b>L13</b>	<b>L14</b>	<b>L15</b>
<b>TEST 1/ TOETS 1 (%)</b>	10	18	23	24	27	34	34	36	37	39	40	44	45	48	49
<b>TEST 2/ TOETS 2 (%)</b>	33	21	32	20	58	43	49	48	41	55	50	45	62	68	60

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
2.1		(3)
2.2.1		(1)
2.2.2		(2)
2.3.1		(2)
2.3.2		(2)
		<b>[10]</b>

**QUESTION/VRAAG 3**

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
3.1.1		(2)
3.1.2		(2)

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
3.1.3		(3)
3.1.4		(3)
3.2		(3)
3.3.1		(1)
3.3.2		(4)
		<b>[18]</b>

**QUESTION/VRAAG 4**

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
4.1		(4)
4.2.1		(2)



	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
4.2.2		(4)
4.2.3		(7)
4.3		(4)
		<b>[21]</b>

**QUESTION/VRAAG 5**

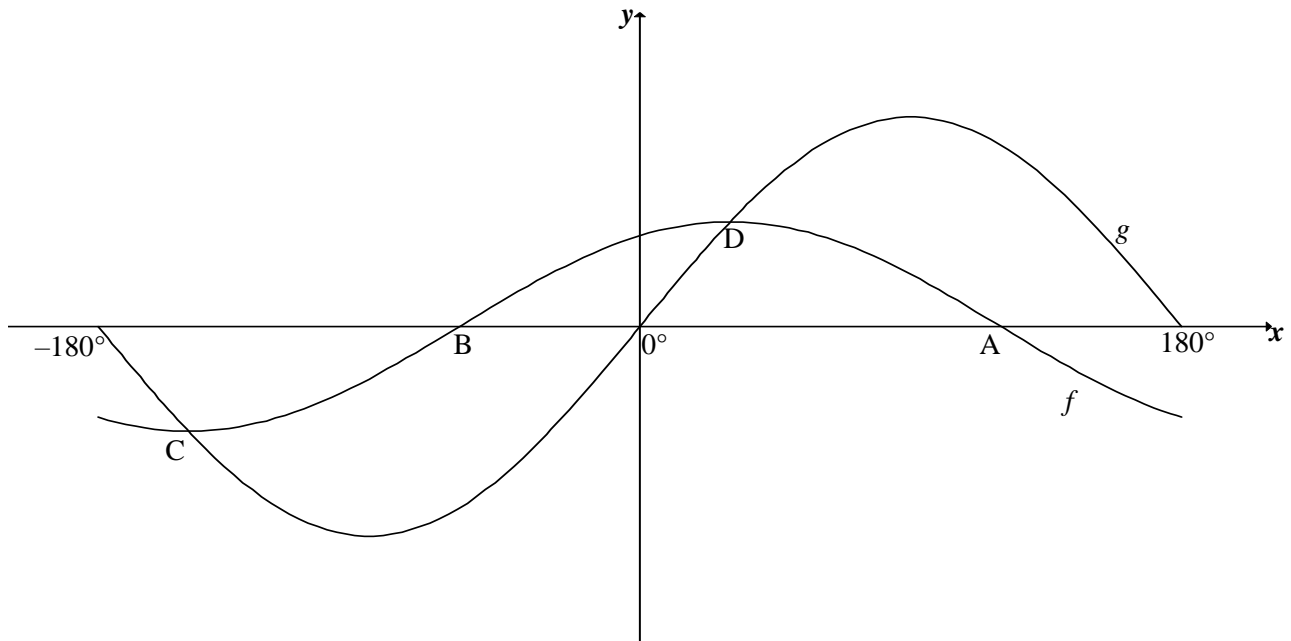
	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
5.1.1		(1)
5.1.2		(1)
5.2		(5)

	<b>Solution/<i>Oplossing</i></b>	<b>Marks <i>Punte</i></b>
5.3		
		(5)
		<b>[12]</b>

**QUESTION/VRAAG 6**

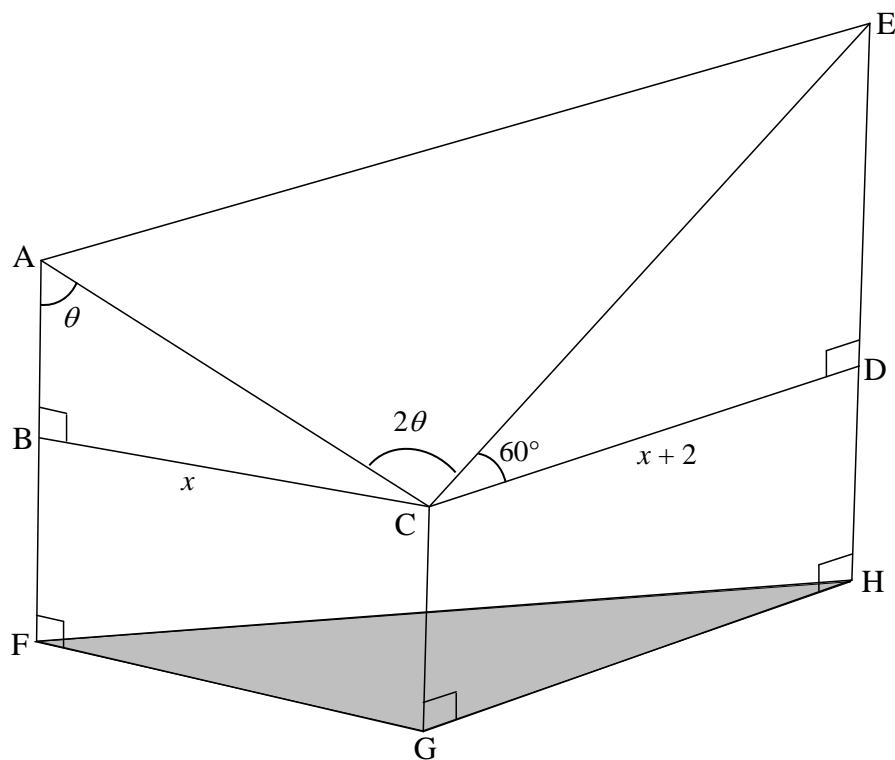
	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
6.1		(6)

6.2



	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
6.2.1(a)		(1)
6.2.1(b)		(2)
6.2.2(a)		(2)
6.2.2(b)		(2)

6.2.3		
		(5)
		[18]

**QUESTION/VRAAG 7**

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
7.1.1		(2)
7.1.2		(2)

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
7.2		(3)
7.3		(4)
		<b>[11]</b>

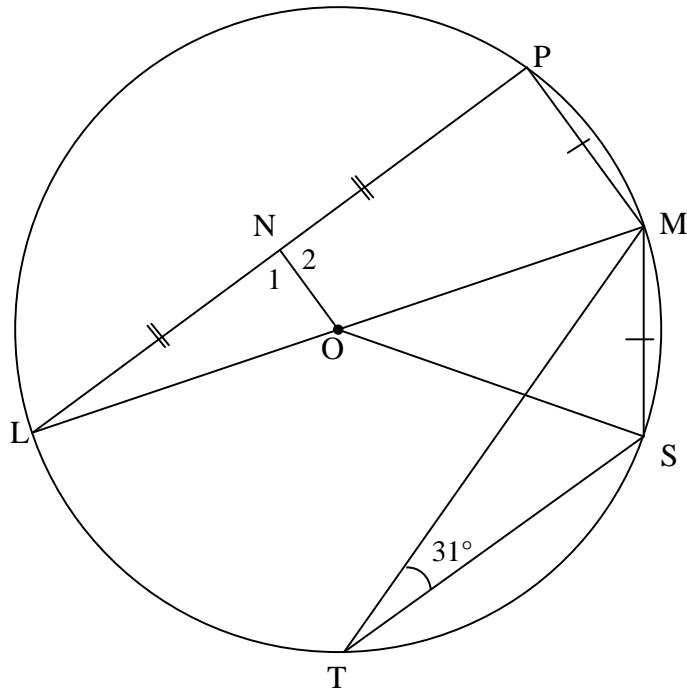


**Give reasons for your statements in QUESTIONS 8, 9 and 10.**

**Gee redes vir jou bewerings in VRAAG 8, 9 en 10.**

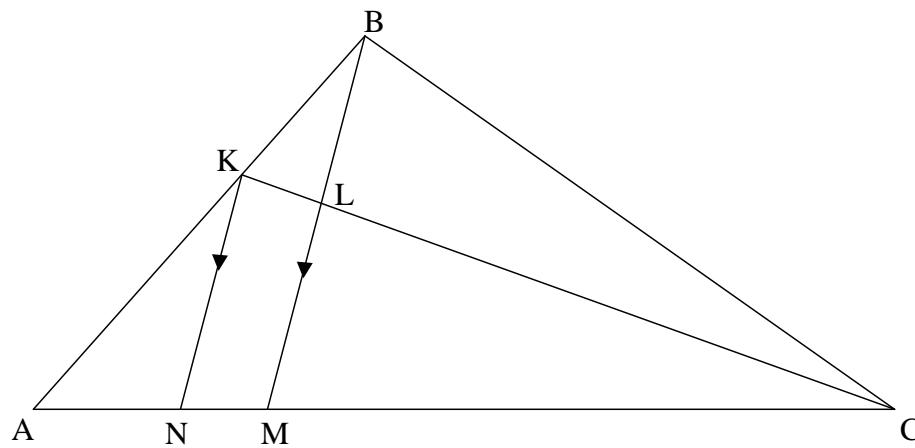
**QUESTION/VRAAG 8**

8.1

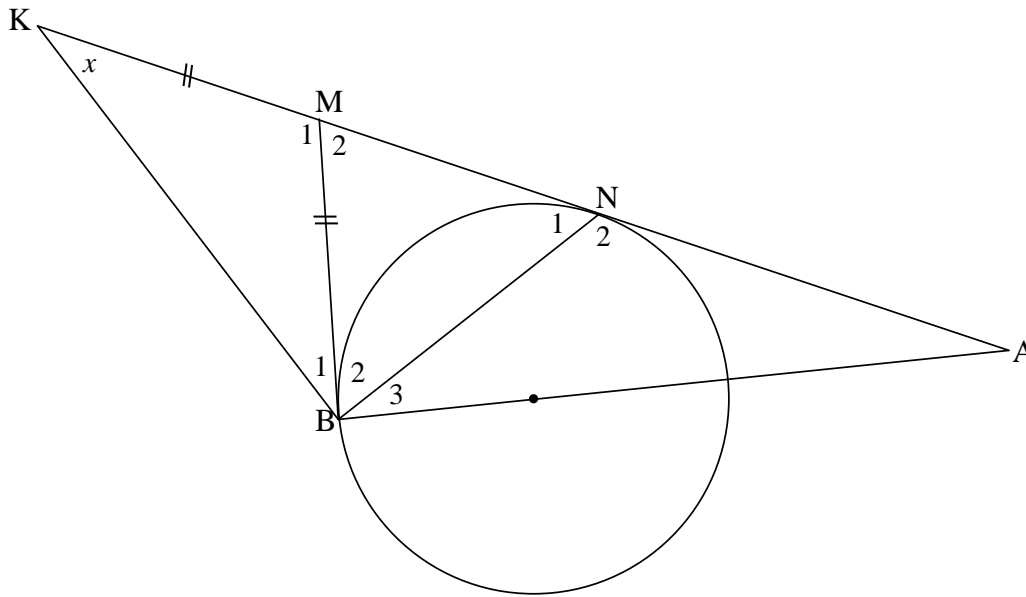


	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
8.1.1(a)		(2)
8.1.1(b)		(2)
8.1.2		(4)

8.2



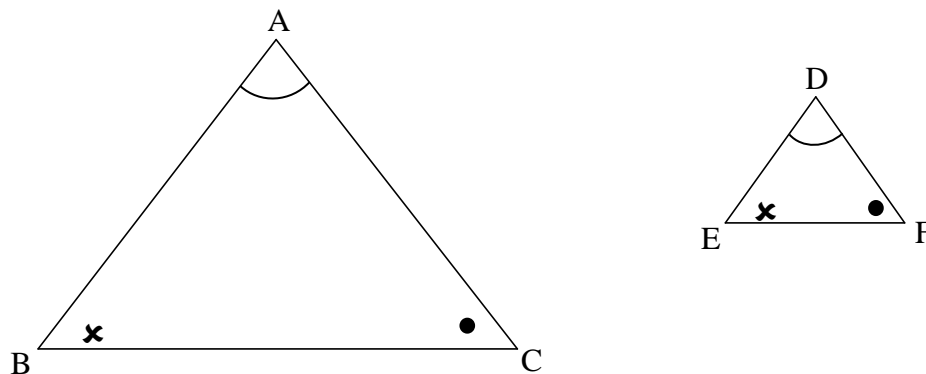
	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
8.2.1		(2)
8.2.2		(3)
		<b>[13]</b>

**QUESTION/VRAAG 9**

	<b>Solution/Oplossing</b>	<b>Marks Punte</b>
9.1		(6)
9.2		(5)
		<b>[11]</b>

**QUESTION/VRAAG 10**

10.1

[illegible]



	<b>Solution/Oplissing</b>	<b>Marks Punte</b>
10.2.2(b)		(5)
10.2.2(c)		(4)
<b>TOTAL/TOTAAL:</b>		<b>[26]</b>
		<b>150</b>

[illegible]

[illegible]



RE-MARK/RE-CHECK HERMERK/HERSIEN				
Question Vraag	Marks Punte			Initials Voorletters
<b>TOTAL TOTAAL</b>				
<b>HASH TOTAL KAF- TOTAAL</b>				