



**education**

Department:  
Education  
North West Provincial Government  
**REPUBLIC OF SOUTH AFRICA**

**LEARNER'S NAME/NAAM VAN LEERDER**

**NATIONAL SENIOR CERTIFICATE/NASIONALE SENIORSERTIFIKAAT**

**MATHEMATICS P2/WISKUNDE V2**

**GRADE 12/GRAAD 12**

**SEPTEMBER 2024**

**SPECIAL ANSWER BOOK/  
SPESIALE ANTWOORDEBOEK**

<b>QUESTION/ VRAAG</b>	<b>MARK/ PUNT</b>	<b>INITIAL/ PARAAF</b>	<b>MODERATOR</b>
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
<b>TOTAL/ TOTAAL</b>			

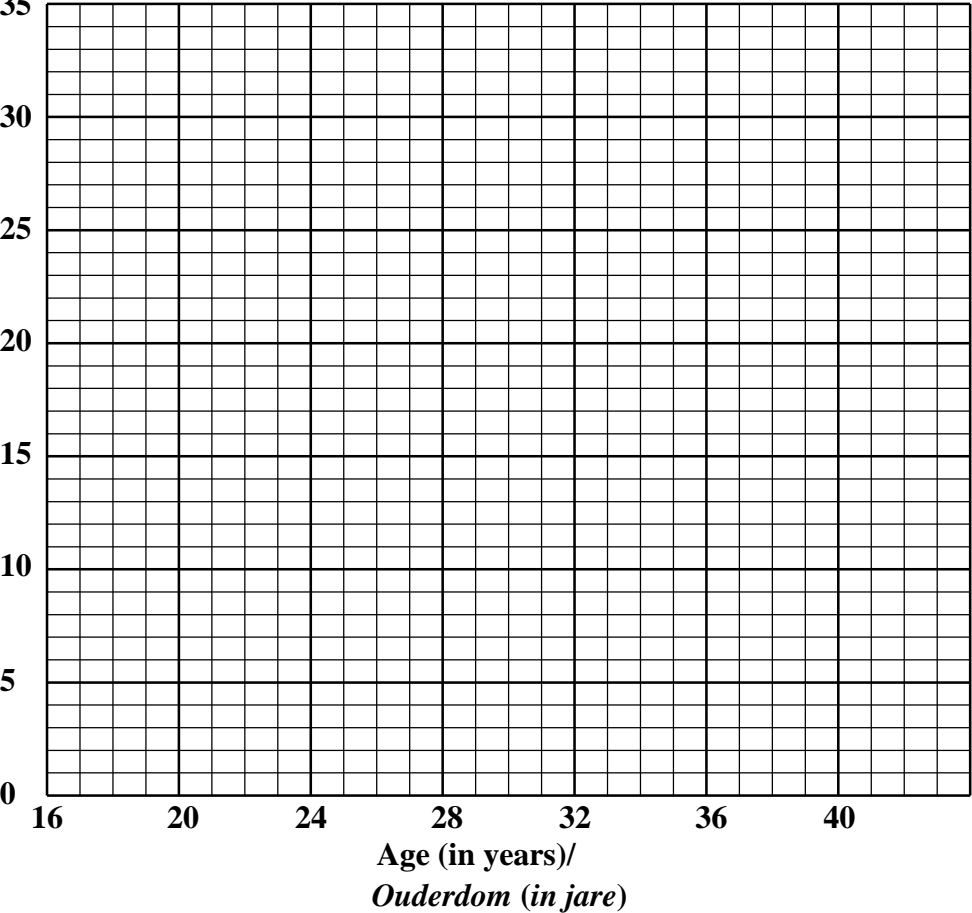
**This answer book consists of 20 pages. /  
Hierdie antwoordeboek bestaan uit 20 bladsye.**

**FOLLOW THESE INSTRUCTIONS CAREFULLY/ VOLG HIERDIE INSTRUKSIES NOUKEURIG**

1. Clearly write your name in the space provided./ *Skryf jou naam in die ruimte soos verskaf.*
2. NO pages may be torn from this answer book./ *GEEN bladsye mag uit hierdie antwoordeboek geskeur word NIE.*
3. Answer ALL questions in the spaces provided./ *Beantwoord ALLE vrae in die ruimtes wat voorsien is.*
4. Read the instructions given in the examination paper carefully./ *Lees die instruksies wat in die eksamenvraestel gegee word, sorgvuldig deur.*
5. Candidates may NOT retain any answer book or remove them from the examination room./ *Kandidate mag GEEN antwoordeboek behou of uit die eksamenlokaal verwyder NIE.*
6. Answers must be written in black/blue ink as distinctly as possible./ *Skryf die antwoorde so duidelik moontlik met swart/blou ink.*
7. Draw a neat line through any work/rough work that must NOT be marked./ *Trek 'n netjiese lyn deur enige werk/rofwerk wat NIE nagesien moet word NIE.*

**QUESTION/VRAAG 1**

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>																		
1.1		(1)																		
1.2		(2)																		
1.3.1	<table border="1"> <thead> <tr> <th><b>Age class Ouderdomklas</b></th> <th><b>Frequency Frekwensie</b></th> <th><b>Cumulative frequency Kumulatiewe frekwensie</b></th> </tr> </thead> <tbody> <tr> <td><math>20 &lt; x \leq 24</math></td> <td>2</td> <td></td> </tr> <tr> <td><math>24 &lt; x \leq 28</math></td> <td>8</td> <td></td> </tr> <tr> <td><math>28 &lt; x \leq 32</math></td> <td>15</td> <td></td> </tr> <tr> <td><math>32 &lt; x \leq 36</math></td> <td>6</td> <td></td> </tr> <tr> <td><math>36 &lt; x \leq 40</math></td> <td>2</td> <td></td> </tr> </tbody> </table>	<b>Age class Ouderdomklas</b>	<b>Frequency Frekwensie</b>	<b>Cumulative frequency Kumulatiewe frekwensie</b>	$20 < x \leq 24$	2		$24 < x \leq 28$	8		$28 < x \leq 32$	15		$32 < x \leq 36$	6		$36 < x \leq 40$	2		(2)
<b>Age class Ouderdomklas</b>	<b>Frequency Frekwensie</b>	<b>Cumulative frequency Kumulatiewe frekwensie</b>																		
$20 < x \leq 24$	2																			
$24 < x \leq 28$	8																			
$28 < x \leq 32$	15																			
$32 < x \leq 36$	6																			
$36 < x \leq 40$	2																			

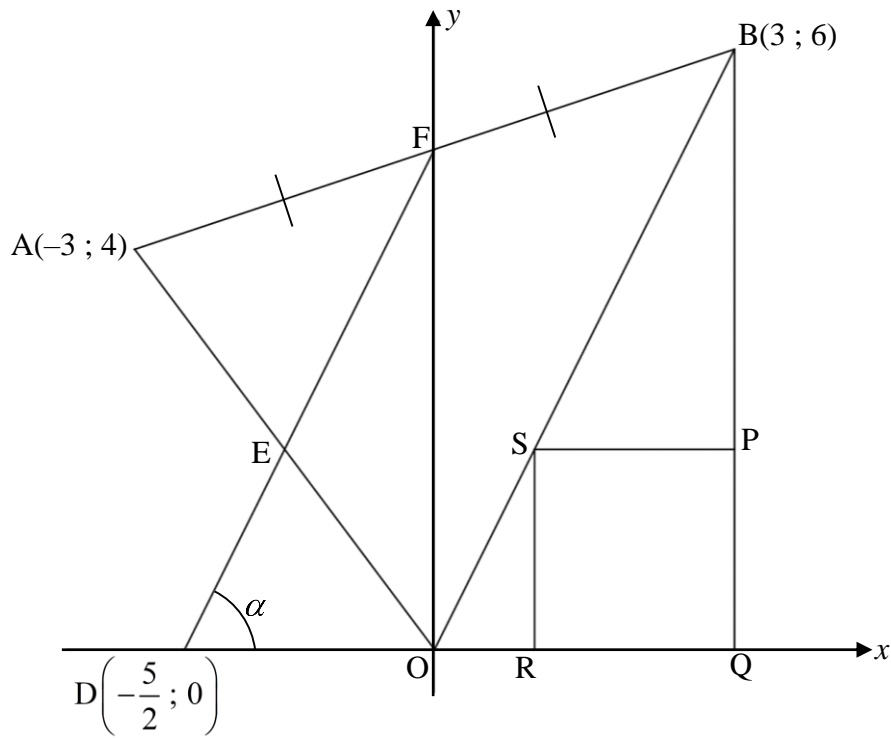
<p>1.3.2</p>	<p style="text-align: center;"><b>Ogive/Ogief</b></p> 	<p style="text-align: right;">(3)</p>
<p>1.4</p>	<p> </p> <p> </p> <p> </p> <p> </p>	<p style="text-align: right;">(2)</p>
<p>1.5</p>	<p> </p> <p> </p> <p> </p> <p> </p> <p> </p>	<p style="text-align: right;">(3)</p>
		<p style="text-align: right;"><b>[13]</b></p>

**QUESTION/VRAAG 2**

<b>Preparatory examination (x)/ Vorbereidende eksamen (x)</b>	38	65	78	23	67	93	39	83	51	66
<b>Final examination (y)/ Finale eksamen (y)</b>	57	72	81	27	59	94	41	85	54	79

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
2.1		(3)
2.2.1		(2)
2.2.2		(2)
2.3		(1)
		<b>[8]</b>

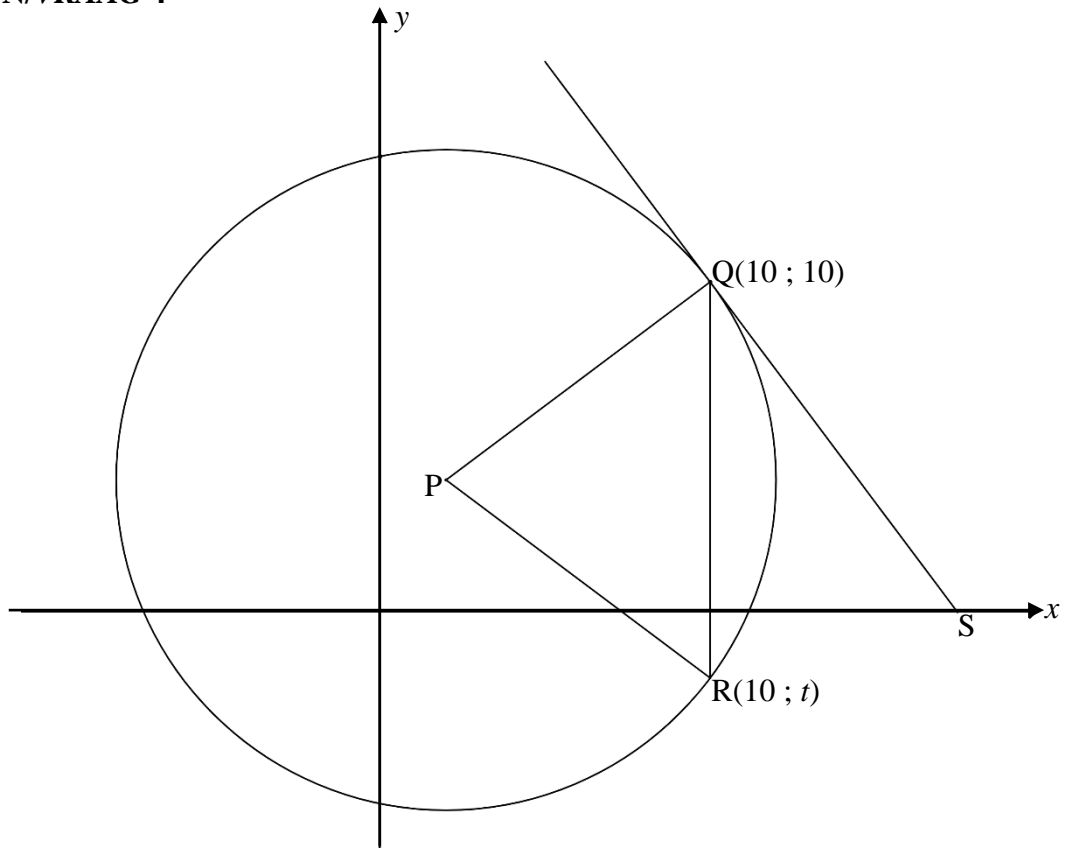
**QUESTION/VRAAG 3**



	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
3.1.1		(2)
3.1.2		(2)
3.1.3		(2)
3.2		(1)

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
3.3		(1)
3.4		(6)
3.5		(4)
		<b>[18]</b>

**QUESTION/VRAAG 4**

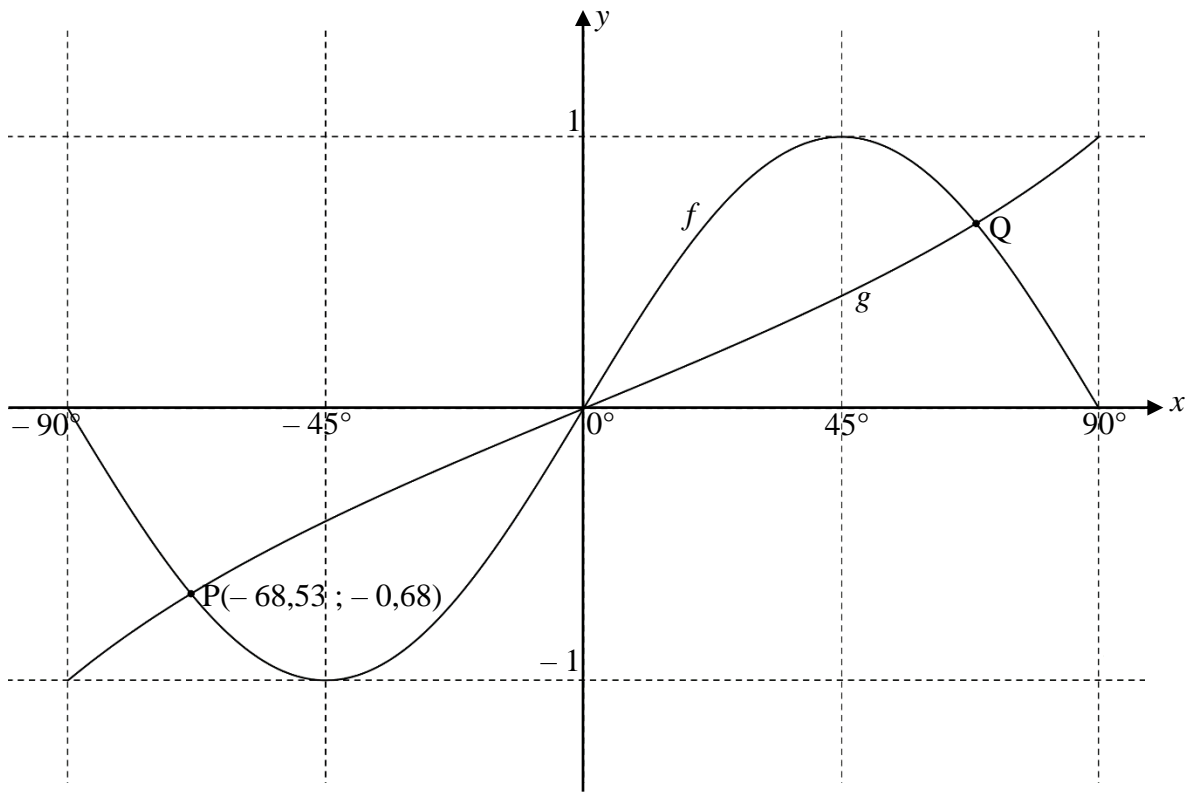


	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
4.1		(2)
4.2.1		(2)
4.2.2		(1)

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
4.3		(5)
4.4		(3)
4.5		(4)
4.6		(4)
		<b>[21]</b>



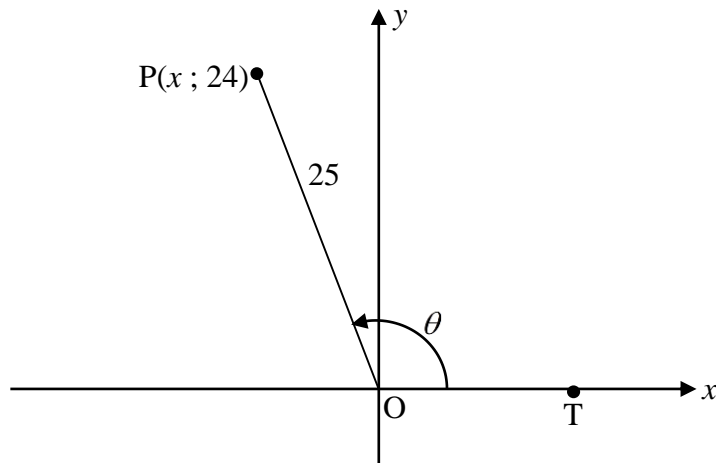
**QUESTION/VRAAG 5**



	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
5.1.1		(1)
5.1.2		(2)
5.1.3		(2)
5.1.4		(2)
5.1.5		(2)

5.1.6		(1)
5.2		(2)
		<b>[12]</b>

**QUESTION/VRAAG 6**

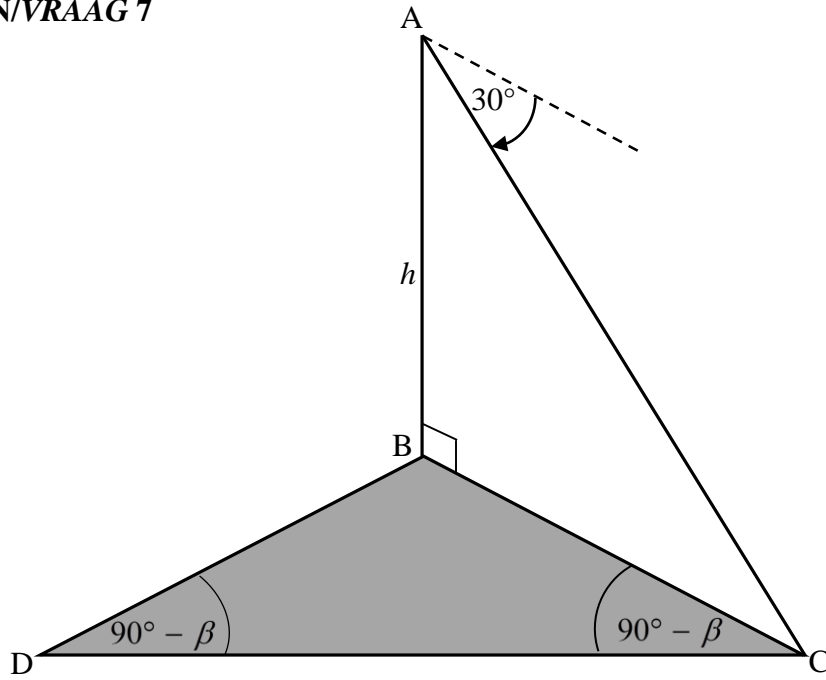


	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
6.1.1		(2)
6.1.2		(2)

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
6.1.3		(2)
6.2.1		(4)
6.2.2		(4)
6.3		(5)

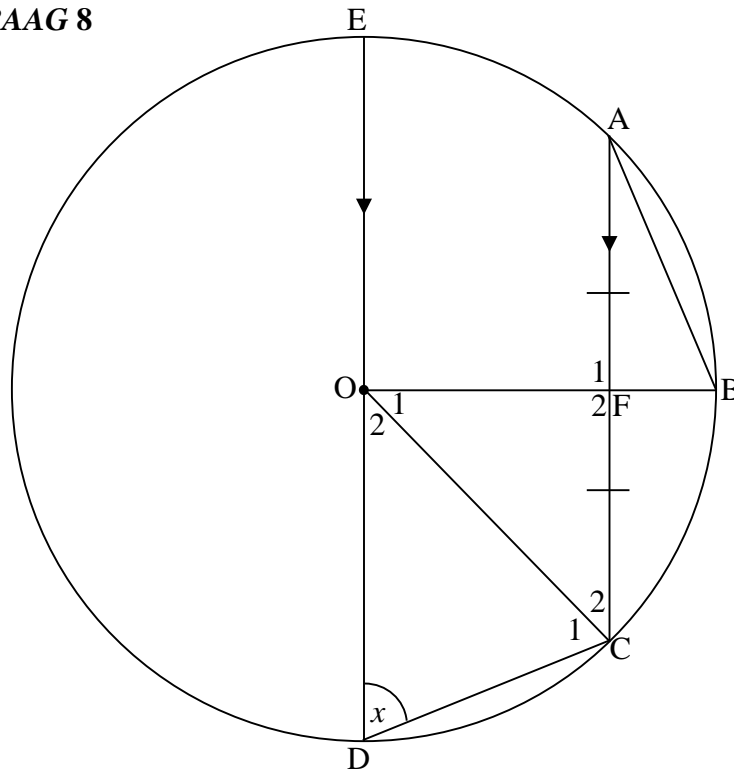
	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
6.4.1		(3)
6.4.2		(2)
6.5		(6)
	<b>[30]</b>	

**QUESTION/VRAAG 7**



	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
7.1		(2)
7.2		(1)
7.3		(5)
		<b>[8]</b>

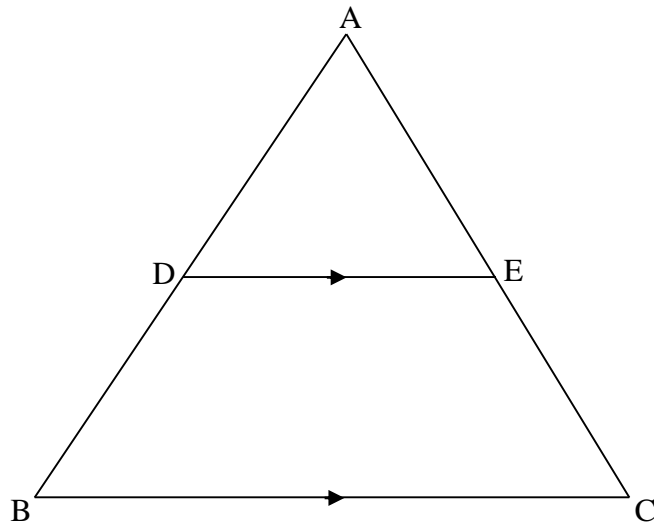
**QUESTION/VRAAG 8**



	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
8.1		(2)
8.2.1		(2)
8.2.2		(6)
		<b>[10]</b>

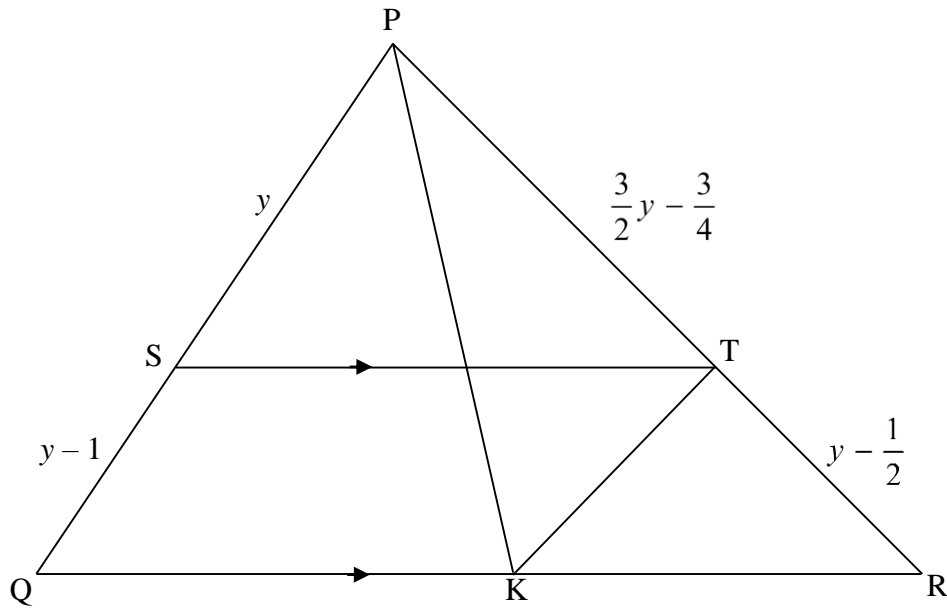
**QUESTION/VRAAG 9**

9.1



	<b>Solution/Oplissing</b>	<b>Marks/Punte</b>
9.1		(5)

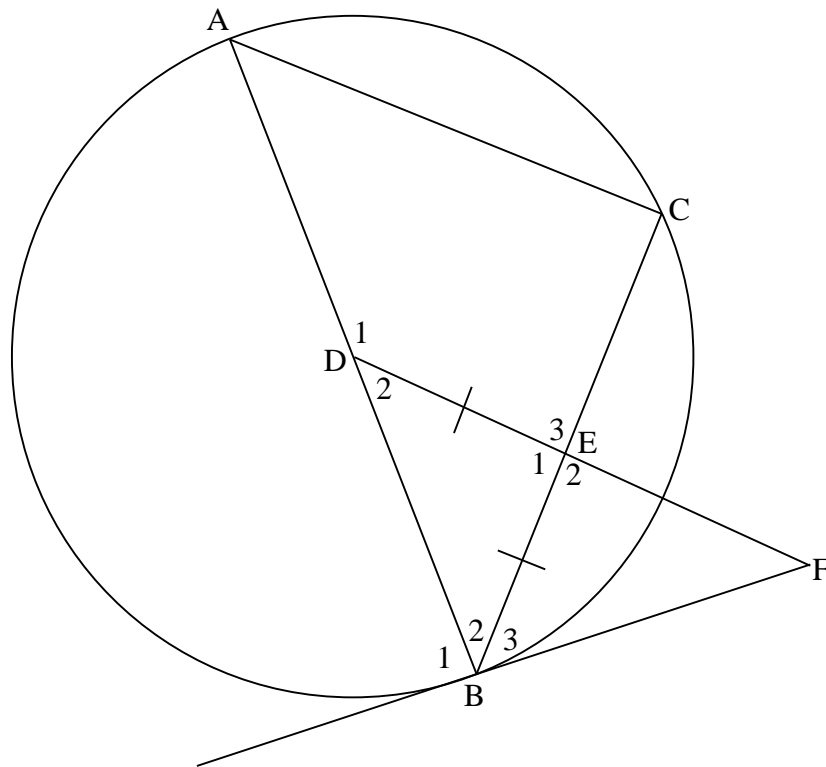
9.2



	<b>Solution/Oplossing</b>	<b>Marks/Punte</b>
9.2.1		(5)
9.2.2		(2)
<b>[12]</b>		



**QUESTION /VRAAG 10**



	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
10.1.1		(4)
10.1.2		(4)

10.1.3		(4)
10.2		(6)

	<b>Additional space/ <i>Bykomende ruimte</i></b>	<b>Marks/ <i>Punte</i></b>

