



LEARNER'S NAME:  
*LEERDER SE NAAM:*

--

GRADE 11/*GRAAD 11*

--

**NATIONAL/NASIONALE  
SENIOR  
CERTIFICATE/SERTIFIKAAT**

**GRADE 11/*GRAAD 11***

**NOVEMBER 2022**

**MATHEMATICS P2/*WISKUNDE V2*  
SPECIAL ANSWER BOOK/*SPESIALE ANTWOORDEBOEK***

Marker/ <i>Merker</i>			Moderator's initials / <i>Moderator se voorletters</i>								
Question <i>Vraag</i>	Mark <i>Punt</i>	Initial <i>Voorletters</i>	Marks <i>Punte</i>	S M	Marks <i>Punte</i>	D M	Marks <i>Punte</i>	P M	Marks <i>Punte</i>	N M	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
<b>TOTAL/ <i>TOTAAL</i></b>											

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

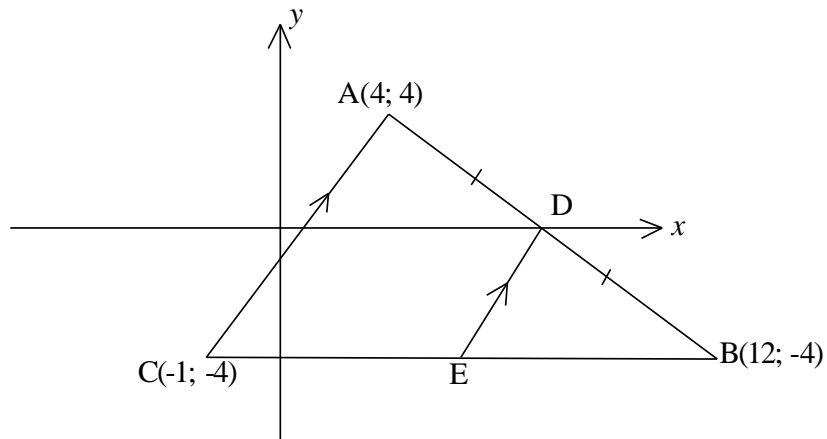
## QUESTION 1/VRAAG 1

1.1		(1)
1.2		(2)
1.3		(2)
1.4		(2)
1.5		(2)
1.6		(2)
		<b>[11]</b>

QUESTION 2/VRAAG 2

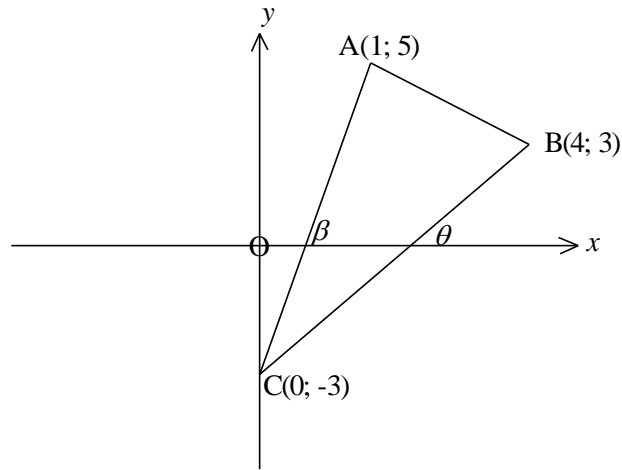
2.1	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">Age <i>Ouderdom</i></th> <th style="padding: 5px;">Frequency <i>Frekwensie</i></th> <th style="padding: 5px;">Cumulative Frequency <i>Kumulatiewe Frekwensie</i></th> </tr> </thead> <tbody> <tr><td style="padding: 5px;"><math>25 &lt; A \leq 30</math></td><td style="padding: 5px;">2</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>30 &lt; A \leq 35</math></td><td style="padding: 5px;">8</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>35 &lt; A \leq 40</math></td><td style="padding: 5px;">4</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>40 &lt; A \leq 45</math></td><td style="padding: 5px;">5</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>45 &lt; A \leq 50</math></td><td style="padding: 5px;">11</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>50 &lt; A \leq 55</math></td><td style="padding: 5px;">19</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>55 &lt; A \leq 60</math></td><td style="padding: 5px;">20</td><td style="padding: 5px;"></td></tr> <tr><td style="padding: 5px;"><math>60 &lt; A \leq 65</math></td><td style="padding: 5px;">6</td><td style="padding: 5px;"></td></tr> </tbody> </table>	Age <i>Ouderdom</i>	Frequency <i>Frekwensie</i>	Cumulative Frequency <i>Kumulatiewe Frekwensie</i>	$25 < A \leq 30$	2		$30 < A \leq 35$	8		$35 < A \leq 40$	4		$40 < A \leq 45$	5		$45 < A \leq 50$	11		$50 < A \leq 55$	19		$55 < A \leq 60$	20		$60 < A \leq 65$	6		(2)
Age <i>Ouderdom</i>	Frequency <i>Frekwensie</i>	Cumulative Frequency <i>Kumulatiewe Frekwensie</i>																											
$25 < A \leq 30$	2																												
$30 < A \leq 35$	8																												
$35 < A \leq 40$	4																												
$40 < A \leq 45$	5																												
$45 < A \leq 50$	11																												
$50 < A \leq 55$	19																												
$55 < A \leq 60$	20																												
$60 < A \leq 65$	6																												
2.2	<p><b>Age of Teachers</b> <i>Ouderdom van Onderwysers</i></p>	(4)																											
2.3	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> </table>					(2)																							
2.4	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> <tr><td style="height: 20px;"></td></tr> </table>				(2)																								
		<b>[10]</b>																											

QUESTION 3/VRAAG 3



3.1		(2)
3.2		(2)
3.3		(4)
3.4		(3)
		<b>[11]</b>

QUESTION 4/VRAAG 4



4.1

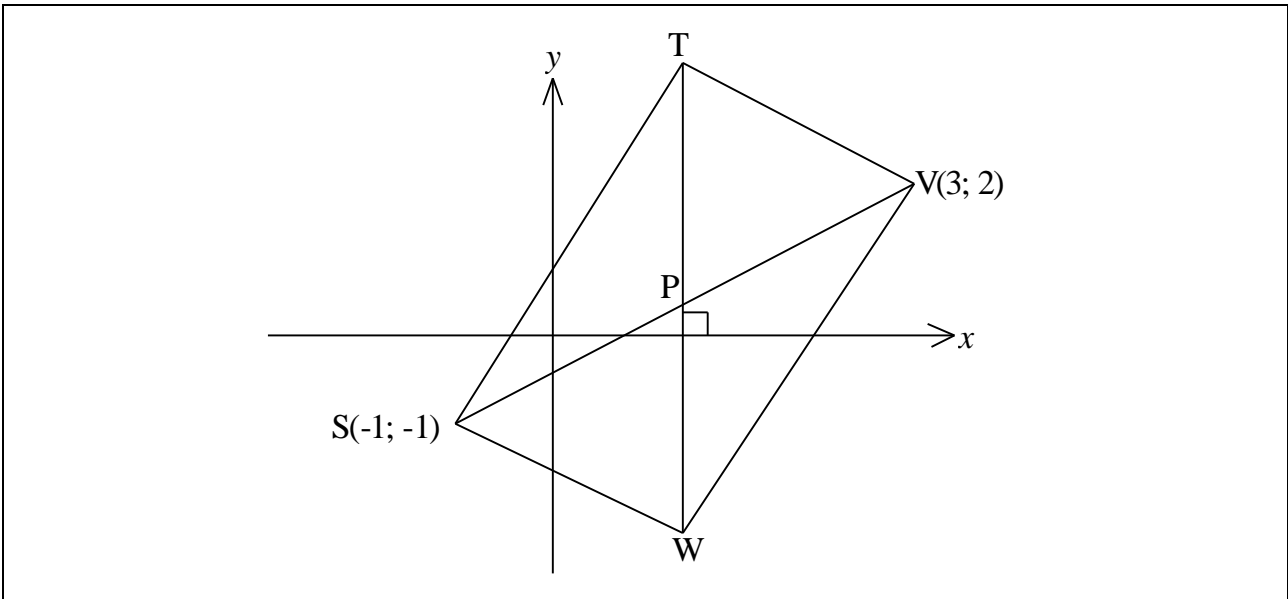

(2)

4.2


(5)

4.3		
	(5)	
	[12]	

QUESTION 5/VRAAG 5



		(6)
		[6]

## QUESTION 6/VRAAG 6

6.1	Draw your sketch here <i>Teken jou skets hier</i>	Do your calculations here <i>Doen jou berekeninge hier</i>	
			(5)
6.2.1			
			(2)
6.2.2			
			(2)
6.2.3			
			(2)

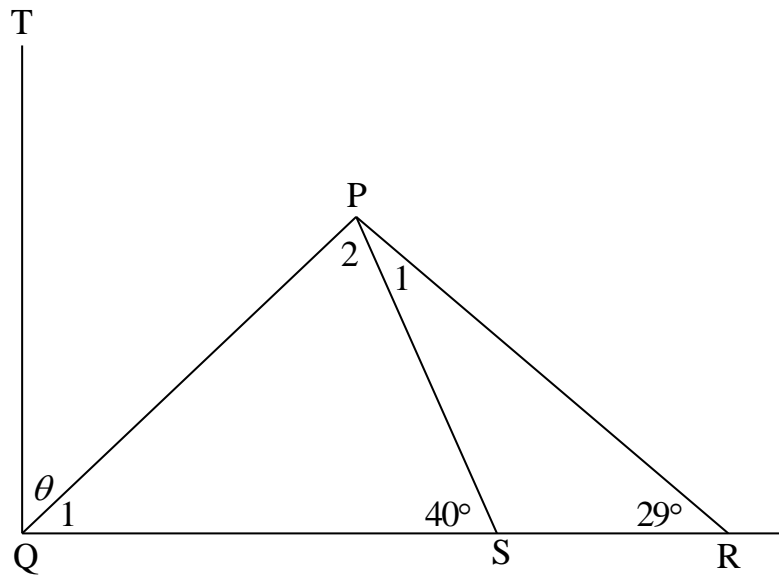


6.3.1		(7)
6.3.2		(6)

6.4		(5)
6.5		(7)

6.6		
		(5)
		<b>[41]</b>

QUESTION 7/VRAAG 7

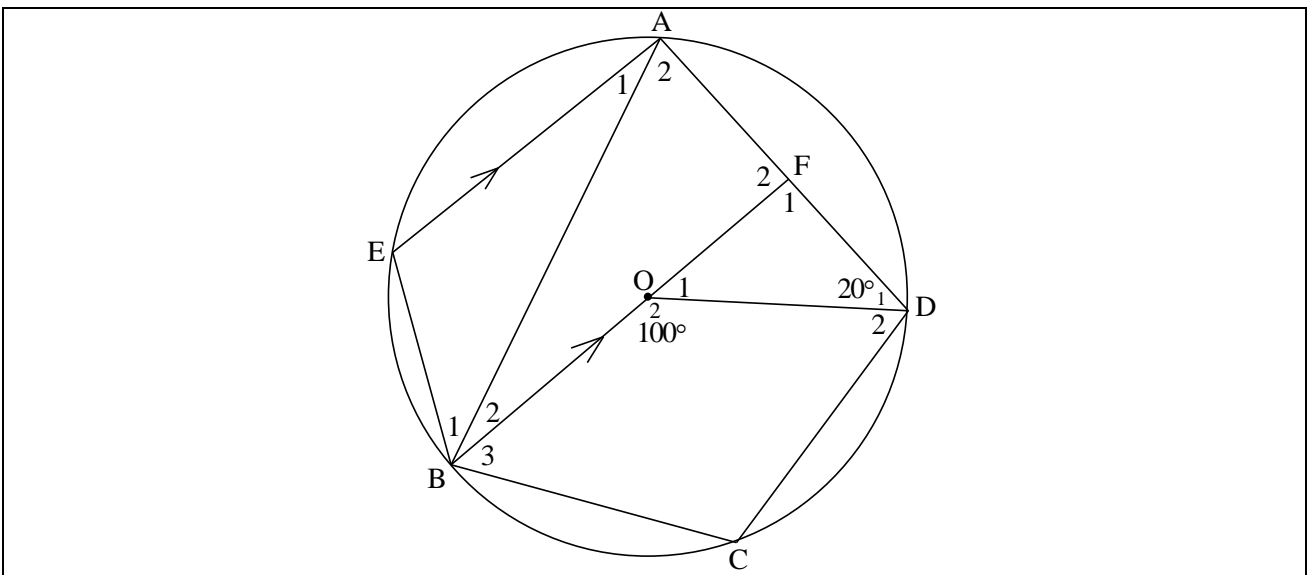


7.1		(1)
7.2		(3)
7.3		(5)
		<b>[9]</b>

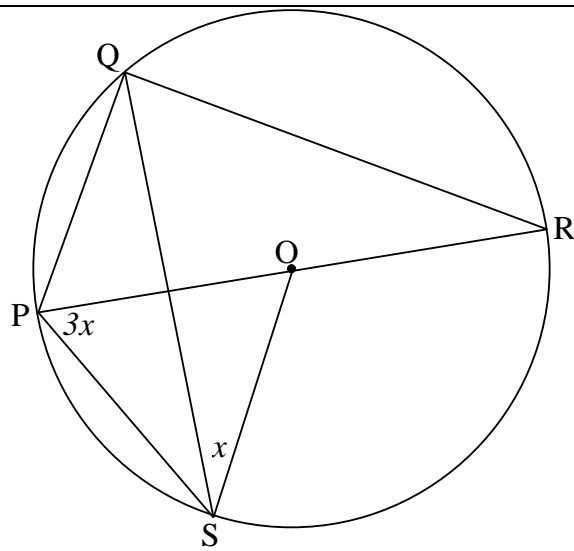
**QUESTION 8/VRAAG 8**

8.1		(2)
8.2		(2)
8.3		(3)
8.4		(1)
		<b>[8]</b>

**QUESTION 9/VRAAG 9**



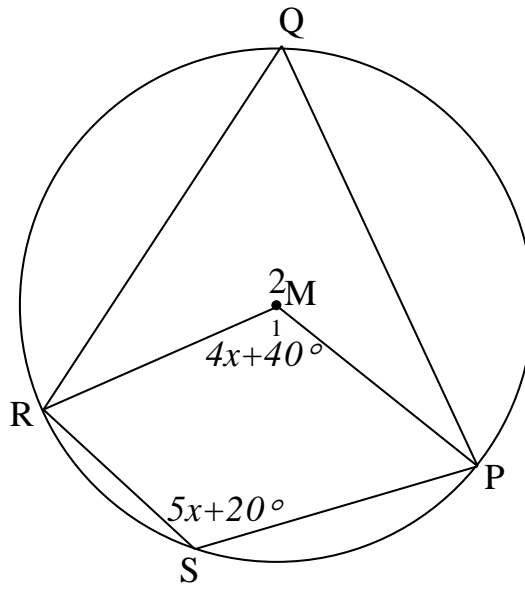
9.1		Statement <i>Stelling</i>	Reason/ <i>Rede</i>	(5)
	9.1.1	$\hat{A}_2 = 50^\circ$		
	9.1.2	$\hat{O}_1 = 80^\circ$		
	9.1.3	$\hat{F}_1 = 80^\circ$		
	9.1.4	$\hat{A}_1 = 30^\circ$		
	9.1.5	$\hat{B}_2 = 30^\circ$		



9.2.1		(2)
9.2.2		(3)
9.2.3		(3)
9.2.4		(2)
9.2.5		(2)
		<b>[17]</b>

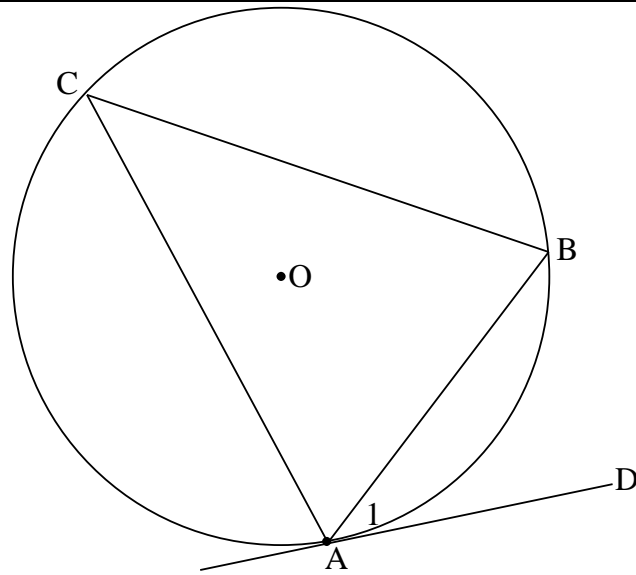
QUESTION 10/VRAAG 10

10.1



(5)

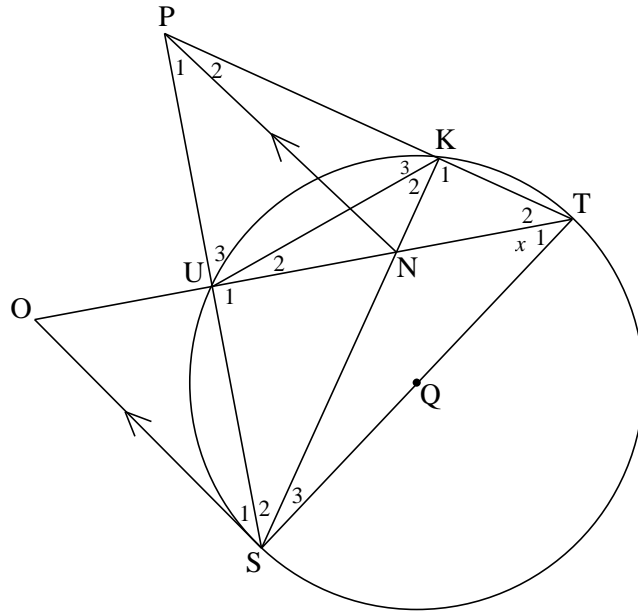
10.2




(6)



10.3



10.3.1


(5)

10.3.2


(6)

10.3.3		
	(3)	
	[25]	
	<b>TOTAL/TOTAAL: 150</b>	

	<b>Additional Space/Addisionele ruimte</b>	

	<b>Additional Space/Addisionele ruimte</b>	