



LEARNER'S NAME:  
*LEERDERNAAM:*

GRADE 12  
*GRAAD 12*

## NATIONAL SENIOR CERTIFICATE

**GRADE 12**

**JUNE 2023**

### MATHEMATICS P2 SPECIAL ANSWER BOOK (DEAF)

Marker/ <i>Merker</i>				Moderator's Initial / <i>Moderator se paraaf</i>																
Question <i>Vraag</i>	Mark <i>Punt</i>			Initial <i>Parafeer</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																				
TOTAL <i>TOTAAL</i>																				

\*SM = School Moderator    \*DM = District Moderator    \*PM = Provincial Moderator    \*NM = National Moderator  
\*

This special answer book has 22 pages.

**QUESTION 1/VRAAG 1**

	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
1.1		(2)
1.2		(2)
1.3		(2)
1.4		(2)
		<b>[8]</b>

## QUESTION 2/VRAAG 2

	Solution/Oplossing	Marks/ Punte																											
2.1	<table border="1"> <thead> <tr> <th>Hours / Ure</th><th>Number of dads <i>Aantal Pa's</i></th><th>Cumulative frequency <i>Kumulatiewe frekwensie</i></th></tr> </thead> <tbody> <tr> <td><math>0 &lt; x \leq 5</math></td><td>1</td><td></td></tr> <tr> <td><math>5 &lt; x \leq 10</math></td><td>18</td><td></td></tr> <tr> <td><math>10 &lt; x \leq 15</math></td><td>24</td><td></td></tr> <tr> <td><math>15 &lt; x \leq 20</math></td><td>25</td><td></td></tr> <tr> <td><math>20 &lt; x \leq 25</math></td><td>18</td><td></td></tr> <tr> <td><math>25 &lt; x \leq 30</math></td><td>12</td><td></td></tr> <tr> <td><math>30 &lt; x \leq 35</math></td><td>1</td><td></td></tr> <tr> <td><math>35 &lt; x \leq 40</math></td><td>1</td><td></td></tr> </tbody> </table>	Hours / Ure	Number of dads <i>Aantal Pa's</i>	Cumulative frequency <i>Kumulatiewe frekwensie</i>	$0 < x \leq 5$	1		$5 < x \leq 10$	18		$10 < x \leq 15$	24		$15 < x \leq 20$	25		$20 < x \leq 25$	18		$25 < x \leq 30$	12		$30 < x \leq 35$	1		$35 < x \leq 40$	1		
Hours / Ure	Number of dads <i>Aantal Pa's</i>	Cumulative frequency <i>Kumulatiewe frekwensie</i>																											
$0 < x \leq 5$	1																												
$5 < x \leq 10$	18																												
$10 < x \leq 15$	24																												
$15 < x \leq 20$	25																												
$20 < x \leq 25$	18																												
$25 < x \leq 30$	12																												
$30 < x \leq 35$	1																												
$35 < x \leq 40$	1																												
	<p style="text-align: center;"><b>Working dads help working moms.</b> <i>Werkende pa's help werkende ma's</i></p>	(4)																											

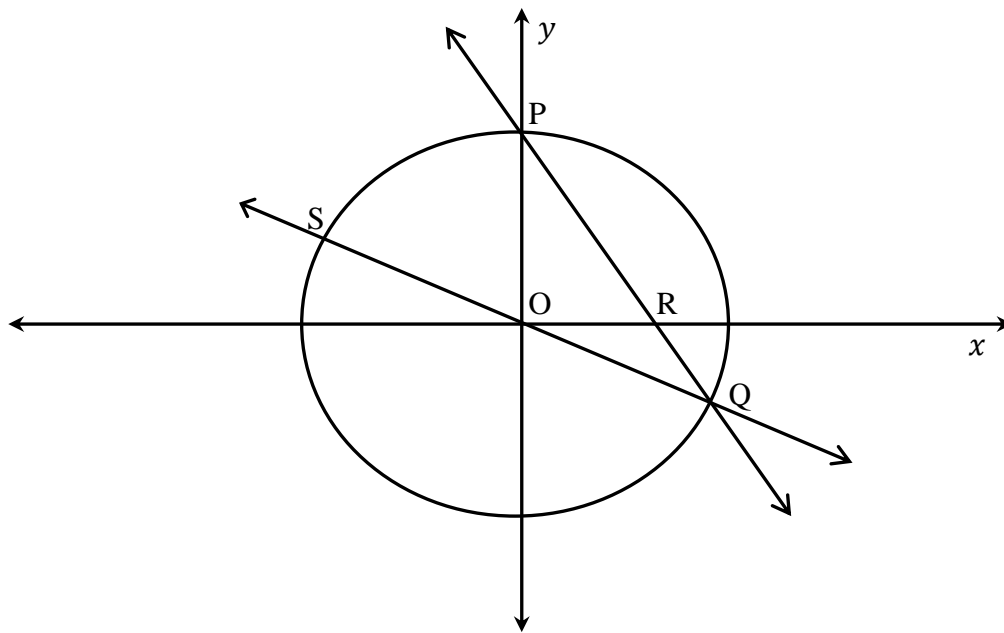
	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
2.2		(2)
2.3		(1)
2.4		(2)
2.5		(3)
		<b>[12]</b>

**QUESTION 3/VRAAG 3**

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
3.1		(3)
3.2		(5)

	<b>Solution/<i>Oplossing</i></b>	<b>Marks/ <i>Punte</i></b>
3.3.1		(2)
3.3.2		(3)
3.3.3		(2)
3.3.4		(6)
		<b>[21]</b>

## QUESTION 4/VRAAG 4



	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
4.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(7)
4.2	<div></div> <div></div> <div></div>	(2)

	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
4.3		(4)
4.4		(5)
		<b>[18]</b>

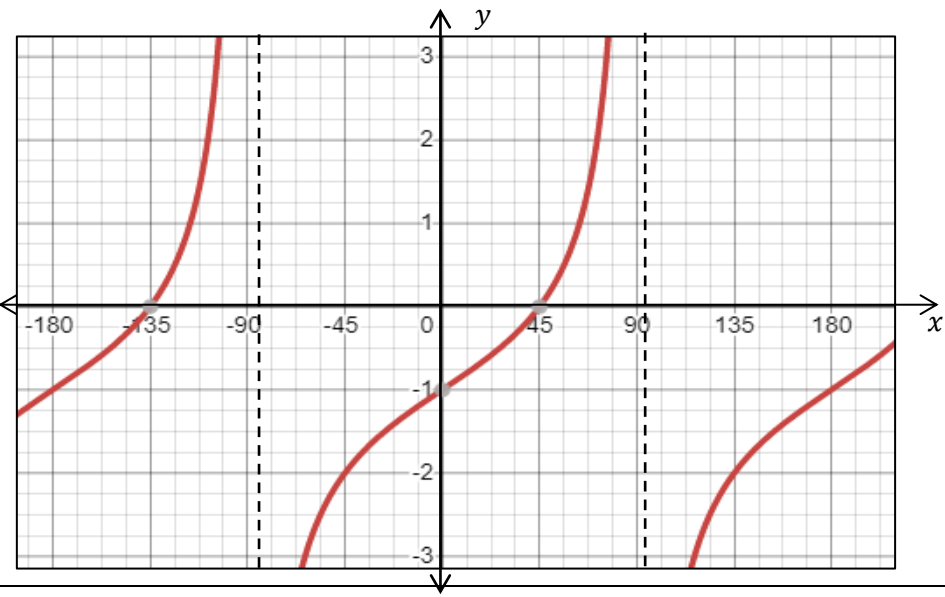
**QUESTION 5/VRAAG 5**

	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
5.1		(6)
5.2.1		(2)
5.2.2		(2)
5.2.3		(2)

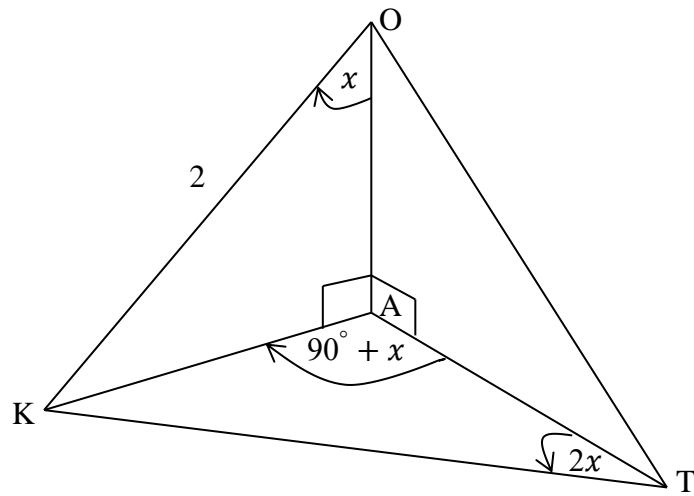


	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
5.3		
		(6)
5.4		
		(5)
5.5		
		(5)
		<b>[28]</b>

## QUESTION 6/VRAAG 6

	Solution/Oplossing	Marks/ Punte
6.1		(3)
6.2		(1)
6.3		(1)
6.4		(3)
6.5		(4)
		[12]

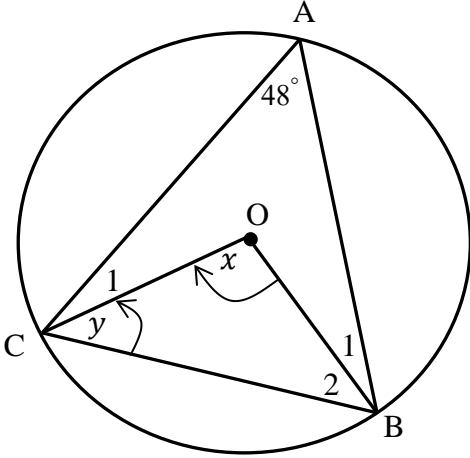
## QUESTION 7/VRAAG 7



	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
7.1		(5)

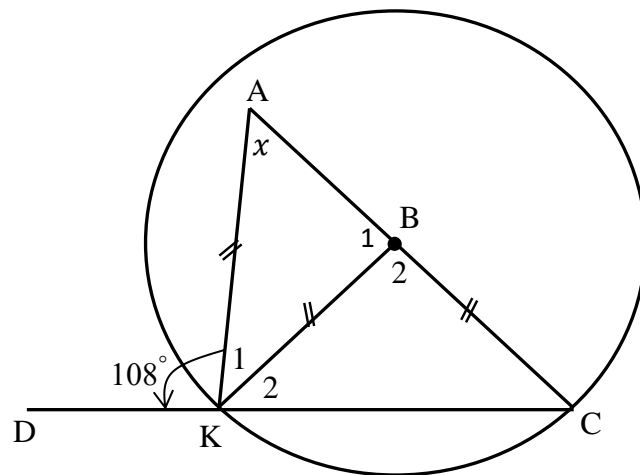
	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
7.2		(2)
7.3		(4)
		<b>[11]</b>

## QUESTION 8/VRAAG 8

8.1		
	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
8.1.1		(2)
8.1.2		(2)

8.2		
	<b>Solution/Oplissing</b>	<b>Marks/ Punte</b>
8.2.1		(2)
8.2.2		(2)

8.3



### Solution/*Oplossing*

Marks/ <i>Punte</i>	
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### 8.3.1

(2)

8.3.2

(3)

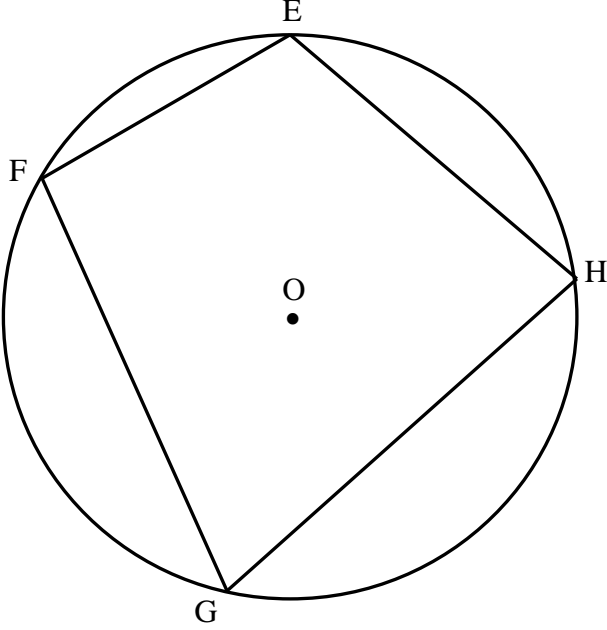
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### 8.3.3

(4)

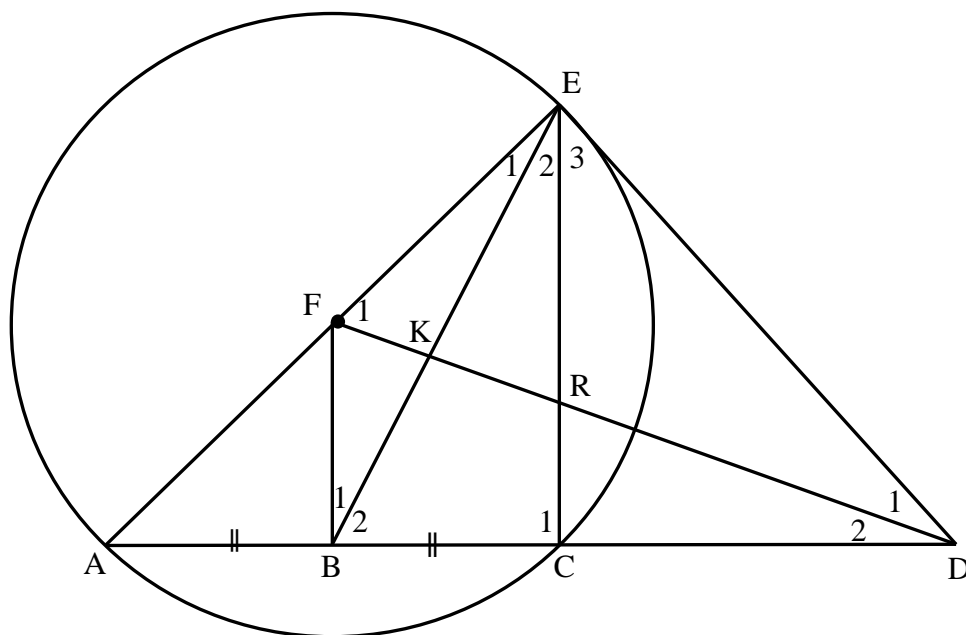
[17]

## QUESTION 9/VRAAG 9

		
	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
		[6]



## QUESTION 10/VRAAG 10



Solution/Oplossing

Marks/  
Punte

10.1

(4)

10.2

(6)

	<b>Solution/Oplossing</b>	<b>Marks/ Punte</b>
10.3		(3)
10.4		(4)
		<b>[17]</b>

**TOTAL/TOTAAL: 150**



[illegible]



[illegible]