



LEARNER'S NAME/
NAAM VAN LEERDER:

CLASS / *KLAS*

NATIONAL SENIOR CERTIFICATE

GRADE/*GRAAD* 11

NOVEMBER 2023

TECHNICAL MATHEMATICS P2 SPECIAL ANSWER BOOK (DEAF LEARNERS)

QUESTION	MARKS			HOD (Level 1 mod.)			DISTRICT (Level 2 mod.)			PROVINCIAL (Level 3 mod.)		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
TOTAL												

This special answer book has 23 pages.

FOLLOW THESE INSTRUCTIONS CAREFULLY

1. **Answer** ALL questions in the **spaces given**.
2. **No pages** may be **torn**_(taken) from this ANSWER BOOK.
3. **Answers** must be **written** in **black/blue ink** as **clearly** as possible.
Do not write in the **margins**.
4. **Show** the **questions** you have **answered** by **drawing** a **circle** around the **relevant numbers** on the **front cover** of the ANSWER BOOK where **marks** are to be **recorded**.
5. **Draw** a **line** through any **work/rough work** that must **not** be **marked**.
6. In the **event** that you use the **additional**_(extra) **space given**:
 - 6.1 **Write** down the **number** of the **question**
 - 6.2 **Leave** a **line** and **rule off** after **your answer**

QUESTION 1

	Solution	Marks
1.1	<div></div> <div></div> <div></div> <div></div>	(1)
1.2	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)
1.3	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)

	Solution	Marks
1.4		(3)
1.5		(4)
1.6		(4)
1.7		(3)
1.8		(5)
		[26]

QUESTION 2

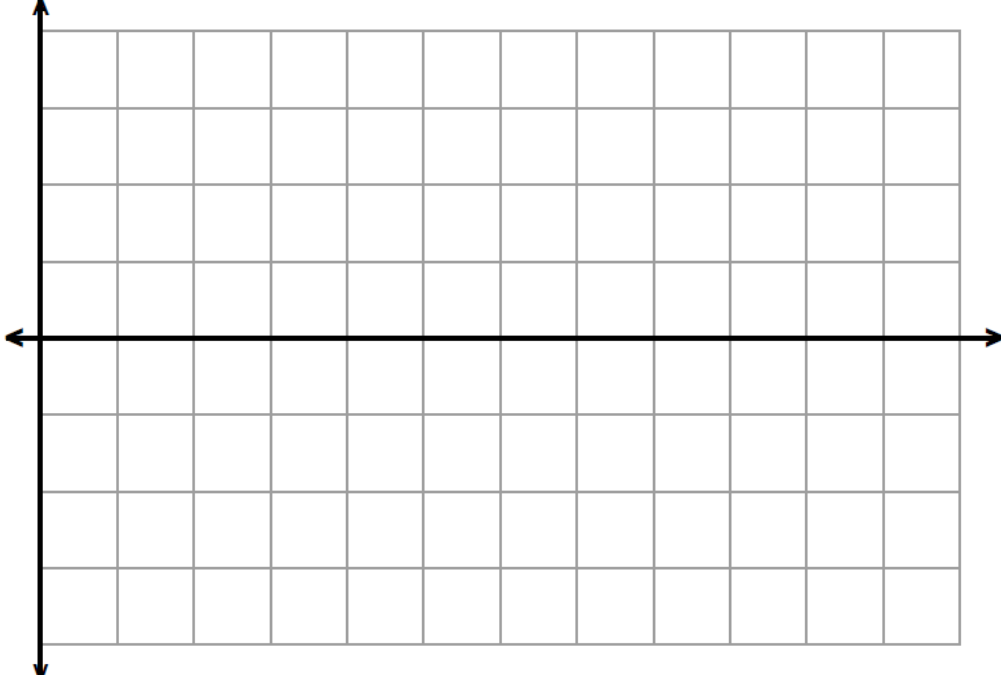
	Solution/<i>Oplossing</i>	Marks
2.1.1		(2)
2.1.2		(3)
2.2.1		(4)
2.2.2		(2)

	Solution	Marks
2.3		
		(4)
		[15]

QUESTION 3

	Solution	Marks
3.1	$\frac{\cos(360^\circ - \theta) \cdot \frac{1}{\cot(180^\circ + \theta)} \cdot \tan(360^\circ + \theta)}{\cos(180^\circ + \theta) \cdot \tan(180^\circ - \theta)}$	(6)
3.2	$\left(\tan x + \frac{1}{\cos x} \right)^2 = \frac{1 + \sin x}{1 - \sin x}$	(4)
		[10]

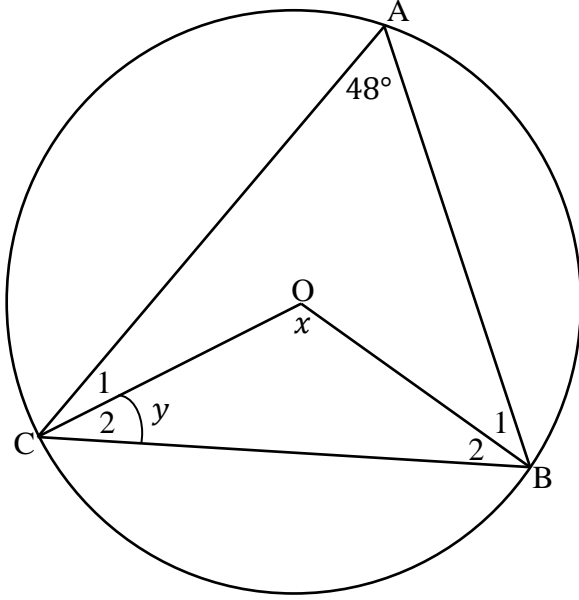
QUESTION 4

	Solution	Marks
4.1		(7)
4.2		(2)
4.3		(1)
4.4		(2)
		[12]

QUESTION 5

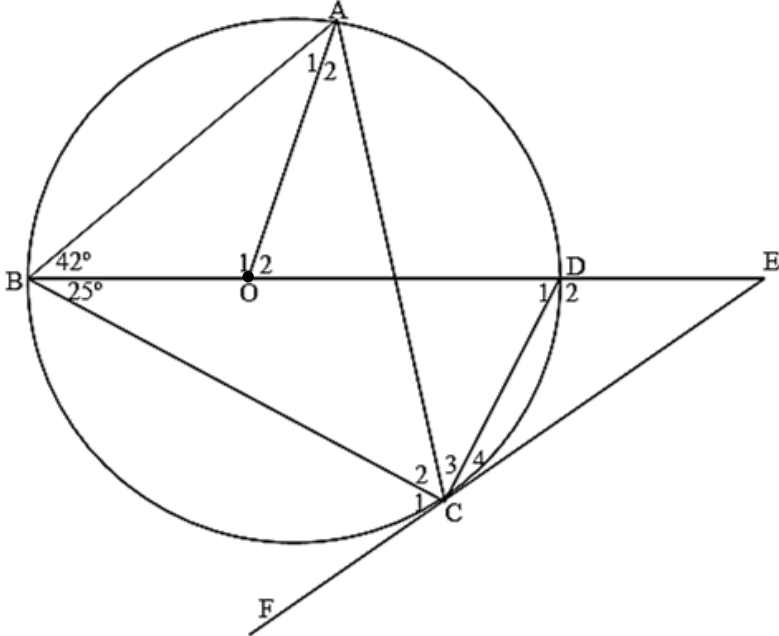
5.1	<div></div> <div></div> <div></div> <div></div> <div></div>	(2)
5.2	<div></div> <div></div> <div></div> <div></div> <div></div>	(3)
5.3	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(6)
		[11]

QUESTION/VRAAG 6

	Solution	Marks
6.1		(1)
6.2		
6.2.1		(2)
6.2.2		(2)
6.3		(1)

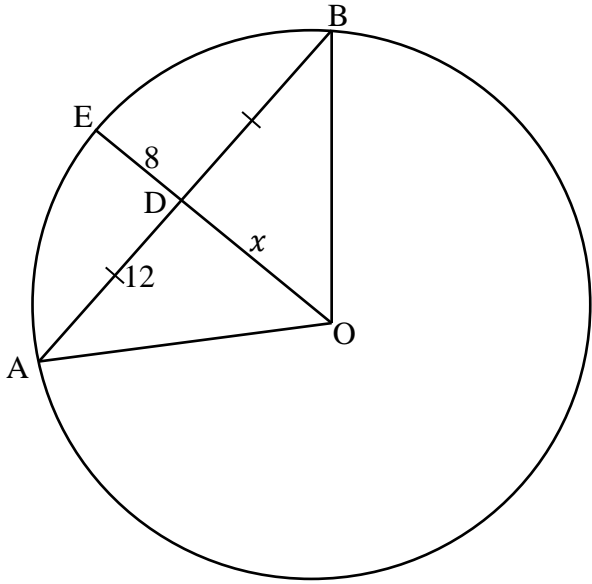
	Solution	Marks
6.4		
6.4.1		(2)
6.4.2		(2)
6.4.3		(2)
		[12]

QUESTION 7

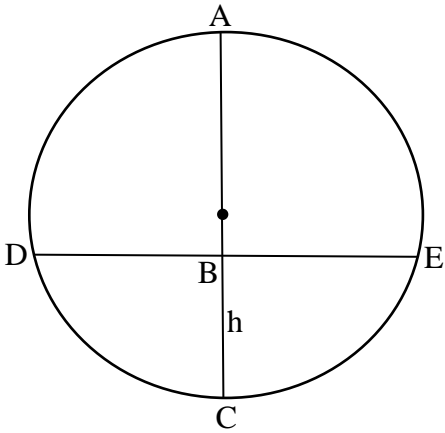
	Solution	Marks
7.1		(1)
7.2		(2)
7.2.1		
		(2)
7.2.2		(2)
7.2.3		(4)
7.3		(1)

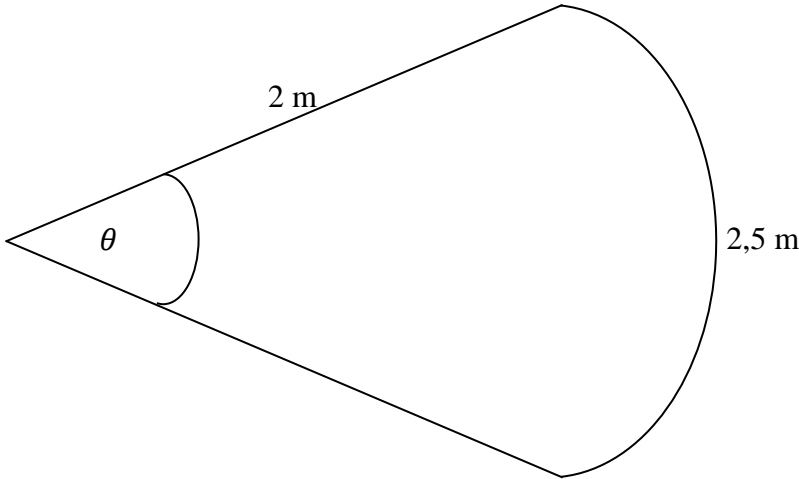
[illegible]

QUESTION 8

	Solution	Marks
8.1		(1)
8.2		(1)
8.2.1		
8.2.2		(3)
8.2.3		(4)
8.2.4		(1)
		[10]

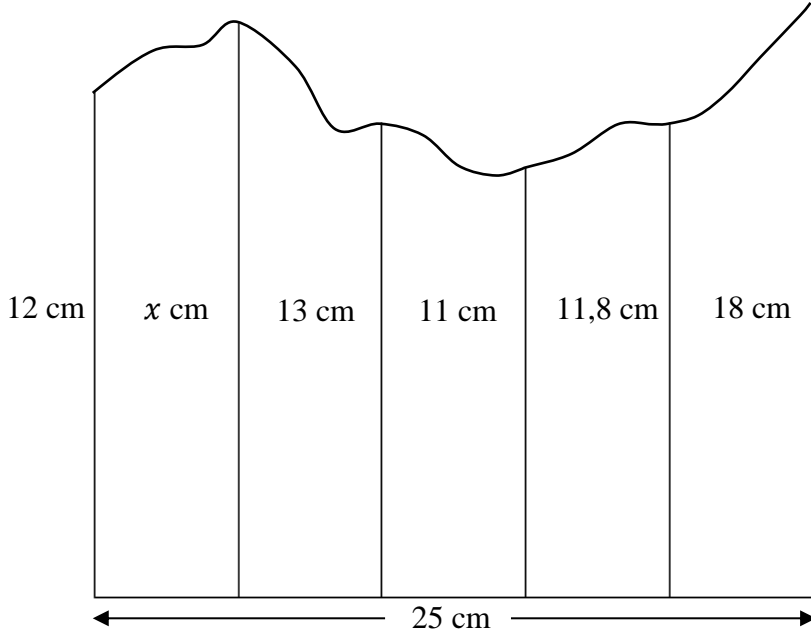
QUESTION 9

	Solution	Marks
9.1		(3)
9.2		(4)
9.3		(6)

	Solution	Marks
9.4		
9.4.1		(3)
9.4.2		(3)
9.4.3		(5)

[illegible]

QUESTION 10

	Solution	Marks
		
		(5)
	TOTAL:	150

	Additional Space	Marks/

	Additional Space	Marks/

	Additional Space	Marks/

	Additional Space	Marks

	Additional Space	Marks