



LEARNER'S NAME:

CLASS:

NATIONAL SENIOR CERTIFICATE

GRADE 12

JUNE 2024

TECHNICAL MATHEMATICS P2 SPECIAL ANSWER BOOK (DEAF)

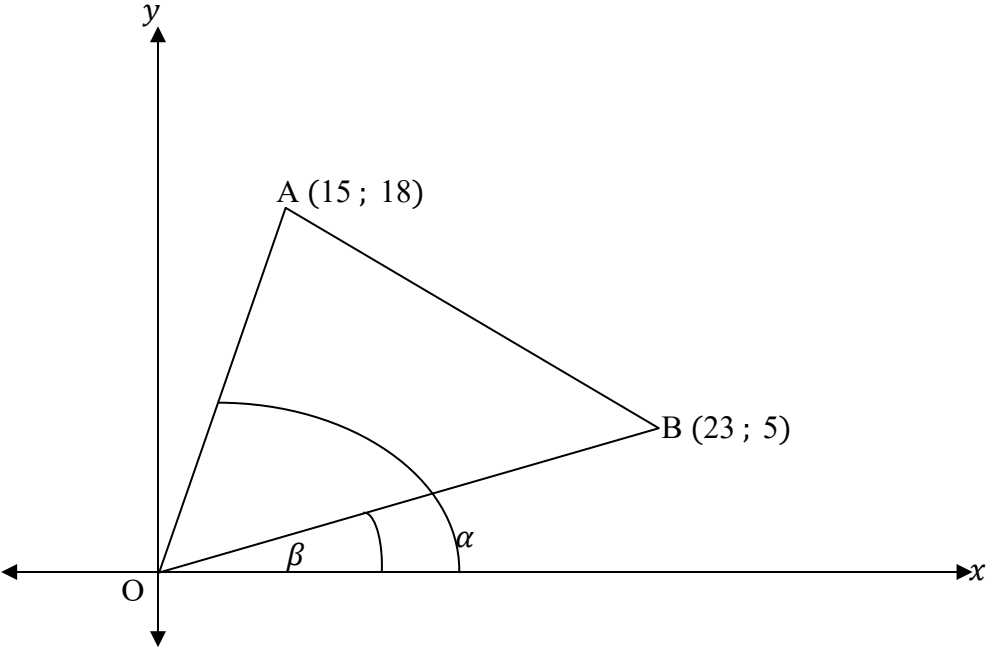
QUESTION	MARKS			HOD (Level 1 mod.)			DISTRICT (Level 2 mod.)			PROVINCIAL (Level 3 mod.)		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
TOTAL												

This special answer book has 25 pages.

FOLLOW THESE INSTRUCTIONS CAREFULLY

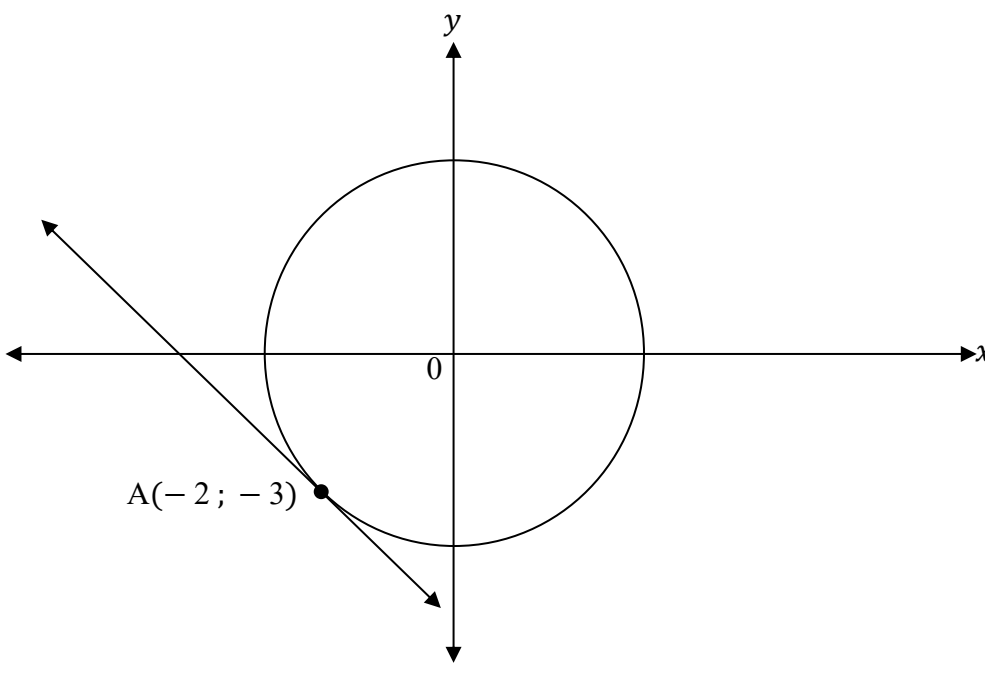
1. **Answer ALL questions** in the spaces provided.
2. **No pages** may be **torn** from this ANSWER BOOK.
3. **Answers** must be **written** in **black/blue ink** as **distinctly**_(clearly) as **possible**.
Do not write in the **margins**.
4. **Indicate**_(show) the **questions** you have **answered** 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 space** provided:
 - 6.1 **Write** down the **number** of the **question**.
 - 6.2 **Leave a line** and **rule off** after your **answer**.

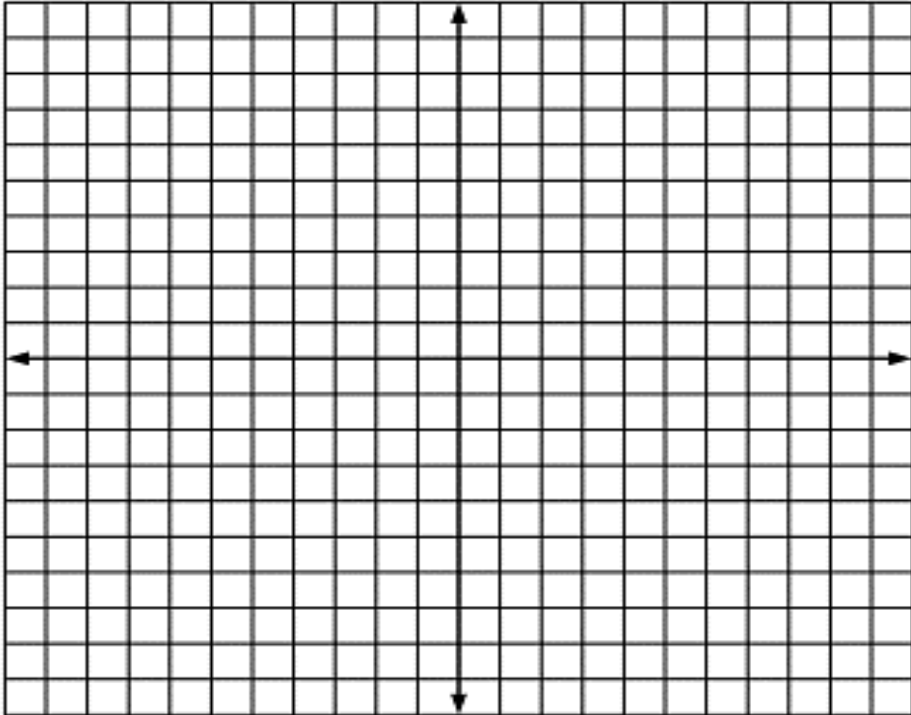
QUESTION 1

	Solution	Marks
		
1.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(4)
1.2	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)

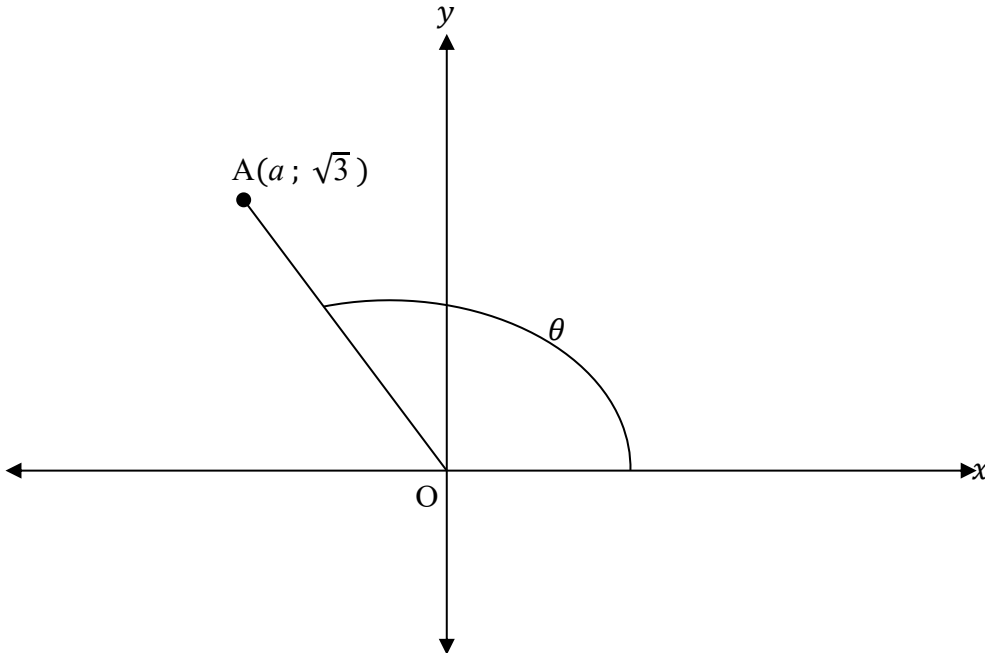
	Solution	Marks
1.3		(4)
1.4		(5)
		[16]

QUESTION 2

	Solution	Marks
2.1		
2.1.1		(1)
2.1.2		(4)
2.1.3		(2)

	Solution	Marks
2.2		
		
		(3)
		[10]

QUESTION 3

	Solution	Marks
3.1		
3.1.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)
3.1.2	<div></div> <div></div> <div></div> <div></div>	(1)
3.1.3	<div></div> <div></div> <div></div> <div></div> <div></div>	(3)

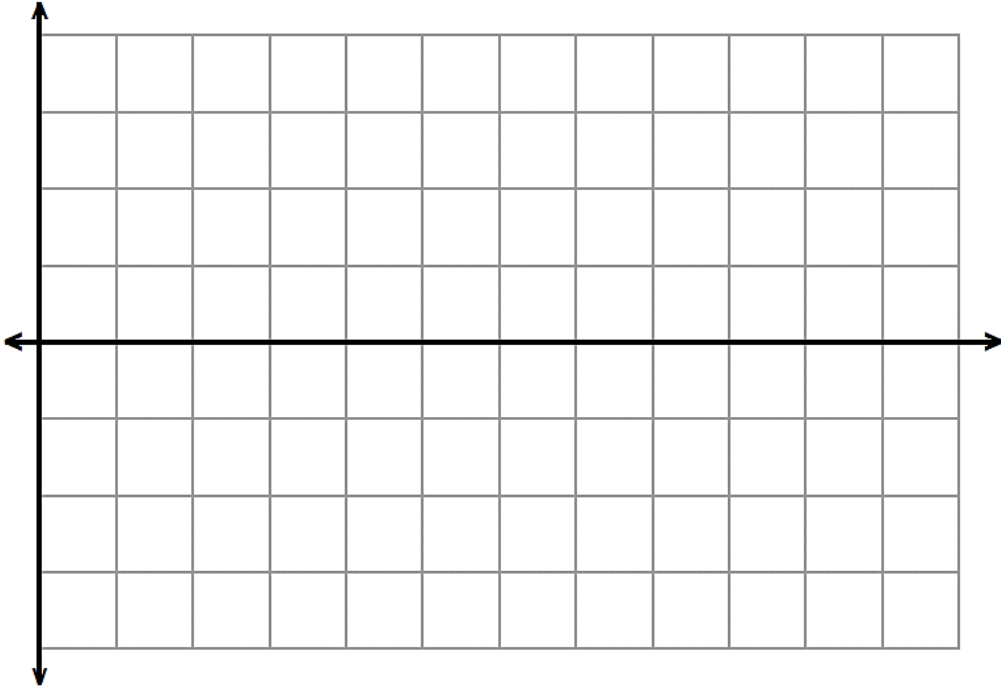
3.2		(4)
		[11]

QUESTION 4

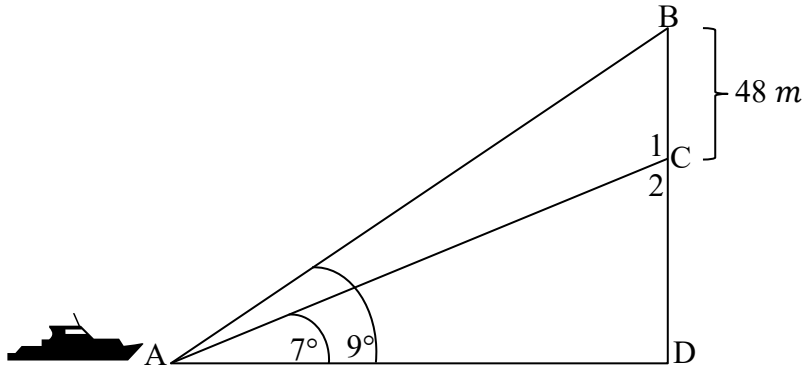
	Solution	Marks
4.1	$\frac{\sin(180^\circ - \theta) \tan(180^\circ + \theta) \sin(270^\circ)}{\cos(360^\circ - \theta) \tan(180^\circ - \theta)}$	(6)

4.2	$(\operatorname{cosec} B - \cot B)^2 = \frac{1 + \cos B}{1 - \cos B}$	
		(6)
		[12]

QUESTION 5

	Solution	Marks
5.1		(1)
5.2		(1)
5.3		(8)
5.4.1		(2)
5.4.2		(2)
		[14]

QUESTION 6

	Solution	Marks
6.1		(1)
6.2		
6.2.1		(2)
6.2.2		(2)
6.2.3		(4)

	Solution	Marks
6.2.4		(2)
6.2.5		(3)
		[14]

QUESTION 7

	Solution	Marks
7.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(6)
7.2	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(5)

	Solution	Marks
7.3		(3)
		[14]

	Solution	Marks
8.1		(8)
8.2		(1)
8.3		(5)
		[14]


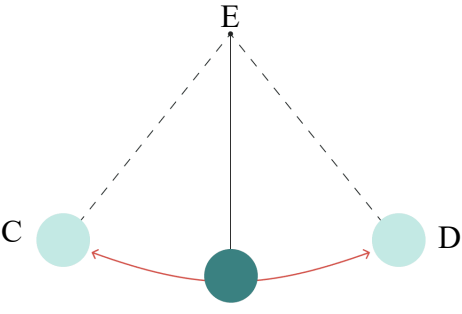
QUESTION 9


	Solution	Marks
9.1		(3)
9.2		(3)
9.3		(6)
		[12]

QUESTION 10

	Solution	Marks
10.1		(2)
10.2		(5)
10.3		(3)
10.4		(3)
10.5		(2)
		[15]

QUESTION 11

	Solution	Marks
11.1	<p>FIGURE A</p>  <p>FIGURE B</p> 	
11.1.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)
11.1.2	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)
11.1.3	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)

	Solution	Marks
11.2		
	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(5)

	Solution	Marks
11.3		
		(4)
		[18]
	TOTAL:	150

	Additional Space	Marks

	Additional Space	Marks

	Additional Space	Marks

	Additional Space	Marks