



Province of the
EASTERN CAPE
EDUCATION

Iphondo leMpuma Kapa: Isobhe leMfundo
Provinsie van die Oos Kaap: Departement van Onderwys
Porafensie Ya Kapa Botjhabela: Lefapha la Thuto

LEARNER'S NAME/
NAAM VAN LEERDER:

CLASS / *KLAS*

**NATIONAL /NASIONALE
SENIOR
CERTIFICATE/ SERTIFIKAAT**

GRADE/GRAAD 11

NOVEMBER 2024

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

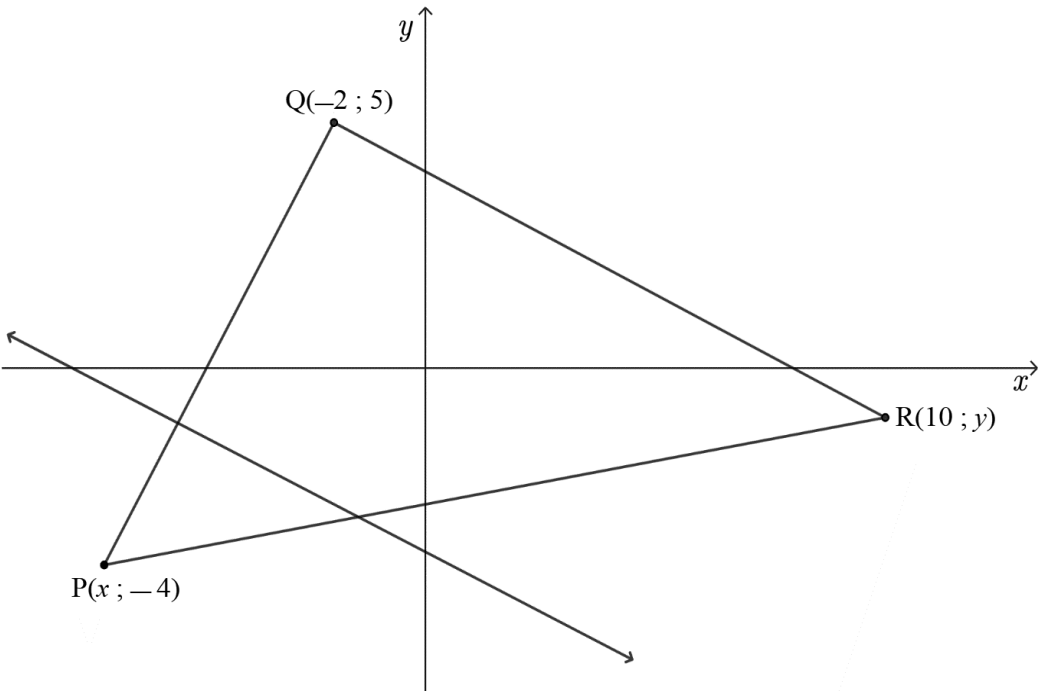
QUESTION/VRAAG	MARKS/PUNTE			HOD/HVD (Level 1 mod./Vlak 1 mod.)			DISTRICT/DISTRIK (Level 2 mod./Vlak 2 mod.)			PROVINCIAL/PROVINSIAAL (Level 3 mod./Vlak 3 mod.)		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
TOTAL/TOTAAL												



This special answer book consists of 24 pages./
Hierdie spesiale antwoordeboek bestaan uit 24 bladsye.

FOLLOW THESE INSTRUCTIONS CAREFULLY	VOLG HIERDIE INSTRUKSIES NOUKEURIG
1. Answer ALL questions in the spaces provided.	1. <i>Beantwoord ALLE vrae in die ruimtes wat voorsien is.</i>
2. No pages may be torn from this answer book.	2. <i>Geen bladsye mag uit hierdie antwoordeboek geskeur word nie.</i>
3. Answers must be written in black/blue ink as distinctly as possible. Do not write in the margins.	3. <i>Skryf die antwoorde so duidelik moontlik met swart/blou ink. Moenie in die kantlyn skryf nie.</i>
4. Indicate 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.	4. <i>Dui die vrae wat jy beantwoord het aan op die voorblad van die antwoordeboek waar die punte aangebring is, deur 'n kringetjie te trek om die nommers van die vrae wat jy beantwoord het.</i>
5. Draw a through any work/rough work that must not be marked.	5. <i>Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie.</i>
6. In the event that you use the additional space provided:	6. <i>Ingeval jy die bykomende ruimte wat voorsien word, gebruik:</i>
6.1 Write down the number of the question	6.1 <i>Skryf die nommer van die vraag neer.</i>
6.2 Leave a line and rule off after your answer.	6.2 <i>Laat 'n lyn oop en trek 'n lyn na jou antwoord.</i>

QUESTION/VRAAG 1

	Solution/Oplossing	Marks/ Punte
		
1.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(2)
1.2	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(3)

	Solution/<i>Oplossing</i>	Marks/ <i>Punte</i>
1.3		(2)
1.4		(5)

	Solution/<i>Oplossing</i>	Marks/ <i>Punte</i>
1.5.1		(1)
1.5.2		(6)
1.5.3		(3)
		[22]

QUESTION/VRAAG 2

	Solution/Oplossing	Marks/ Punte
2.1.1		(2)
2.1.2		(3)
2.2.1		(1)
2.2.2		(4)
2.2.3		(3)

	Solution/Oplossing	Marks/ Punte
2.3		
		(5)
		[18]

QUESTION/VRAAG 3

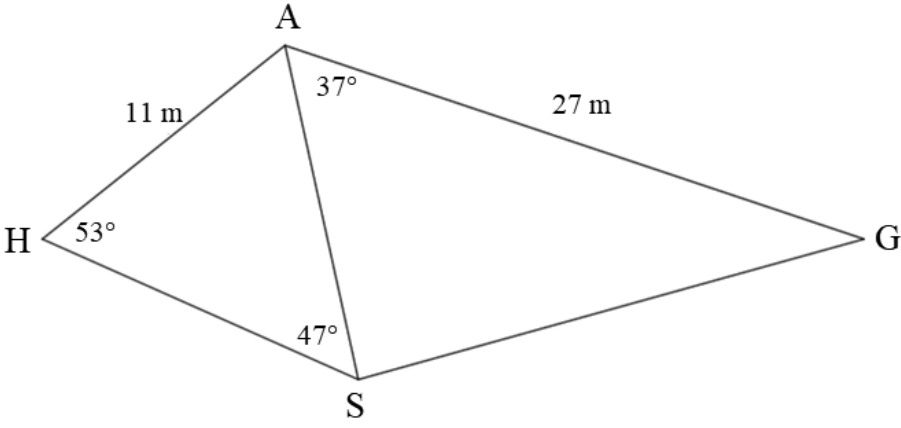
	Solution/Oplossing	Marks/ Punte
3.1.1		(1)
3.1.2		(1)
3.2	$\frac{\tan^2(360^\circ + x) \cdot \sin(180^\circ + x) \cdot \cos(-x)}{\cos(180^\circ + x) \cdot \sin(360^\circ - x) \cdot \tan 315^\circ}$	(7)

	Solution/Oplossing	Marks/ Punte
3.3	$\frac{\sin x}{1 - \cos x} - \frac{\sin x}{1 + \cos x} = 2 \cot x$	
		(5)
		[14]

QUESTION/VRAAG 4

	Solution/Oplissing	Marks/ Punte
4.1		(3)
4.2		(1)
4.3		(1)
4.4		(3)
		[8]

QUESTION/VRAAG 5

	Solution/Oplissing	Marks/ Punte
		
5.1		(1)
5.2		(3)
5.3		(4)

	Solution/Oplossing	Marks/ Punte
5.4		
		(3)
		[11]

QUESTION/VRAAG 6

	Solution/Oplissing	Marks/ Punte
6.1.1		(2)
6.1.2		(3)
6.2		(5)
		[10]

	Solution/<i>Oplossing</i>	Marks/ <i>Punte</i>
7.2.2		(8)
7.3.1		(1)
7.3.2		(2)
7.4		(4)
7.5		(4)
		[24]

QUESTION/VRAAG 8

	Solution/Oplissing	Marks/ Punte
8.1		(1)
8.2.1		(3)
8.2.2		(2)
8.2.3		(3)
		[9]

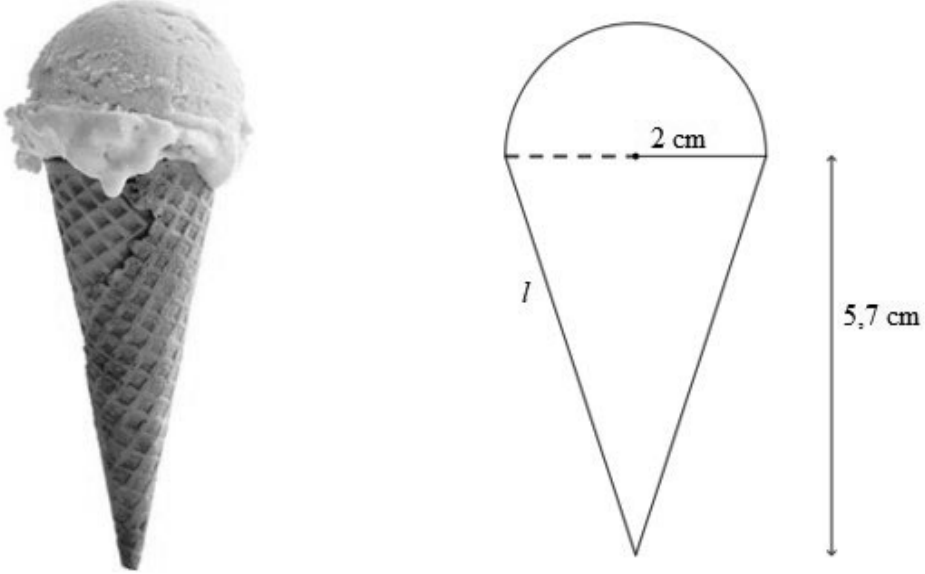
QUESTION/VRAAG 9

	Solution/Oplossing	Marks/ Punte
9.1		(2)
9.2.1		(4)
9.2.2		(3)
9.3.1		(1)
9.3.2		(3)
9.3.3		(4)

	Solution/<i>Oplossing</i>	Marks/ <i>Punte</i>
9.3.4		(3)
		[20]

QUESTION/VRAAG 10

	Solution/Oplossing	Marks/ Punte
10.1	<div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div>	(5)

	Solution/Oplossing	Marks/ Punte
10.2		
10.2.1		(2)
10.2.2		(3)
10.2.3		(4)
		[14]
	TOTAL/TOTAAL:	150

	Additional Space/ <i>Addisionele Ruimte</i>	Marks/ <i>Punte</i>

	Additional Space/ <i>Addisionele Ruimte</i>	Marks/ <i>Punte</i>

	Additional Space/ <i>Addisionele Ruimte</i>	Marks/ <i>Punte</i>

	Additional Space/ <i>Addisionele Ruimte</i>	Marks/ <i>Punte</i>

