



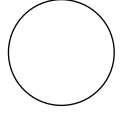
basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Candidate Barcode Label/Stafieskodeplakker

NSC Answer Book NSS-antwoordeboek

National Senior Certificate/Nasionale Senior Sertifikaat (Grade 12/Graad 12)



Sequence no on mark sheet
Volgnommer op puntestaat

CENTRE NUMBER SENTRUMNUMMER								
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EXAMINATION NUMBER EKSAMENNUMMER															
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DATE DATUM							
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BOOK NUMBER BOEKNOMMER		OF VAN		BOOKS BOEKE
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SUBJECT CODE VAKKODE					
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PAPER NUMBER VRAESTELNUMMER	2
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SUBJECT NAME VAKNAAM	TECHNICAL MATHEMATICS/ <i>TEGNIIESE WISKUNDE</i>
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This answer book consists of 19 pages./Hierdie antwoordeboek bestaan uit 19 bladsye.

MARKER/NASIENER			MODERATOR'S INITIALS IN RELEVANT BLOCK MODERATORPARAAF IN BETROKKE BLOKKIE					
Question Vraag	Marks Punte	Marker's Code & Initials	Marks Punte	SM	DCM	CM	IM	EM
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

RE-MARK/RE-CHECK/ HERNASIEN/HERKONTROLEER		
Question Vraag	Marks Punte	Initials Paraaf
1		
2		
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16		

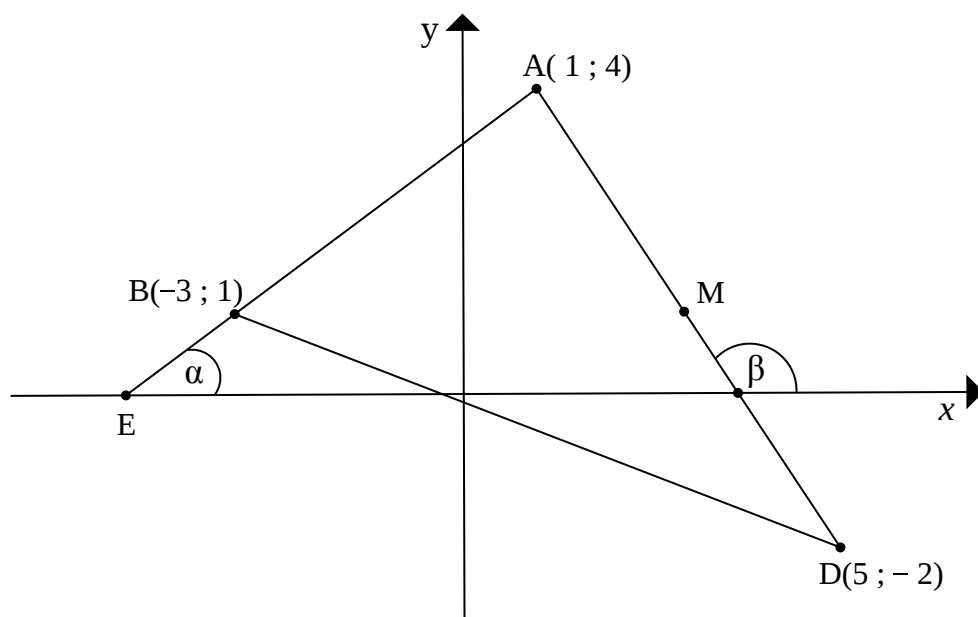
				TOTAL TOTAAL			

TOTAL TOTAAL			
HASH TOTAL KAFTOTAAL			

CONTROLLED AND CERTIFIED CORRECT
(SURNAME AND INITIALS OF EA)

READ INSTRUCTIONS ON THE NEXT PAGE.
LEES INSTRUKSIES OP VOLGENDE BLADSY.

FOLLOW THESE INSTRUCTIONS CAREFULLY	VOLG HIERDIE INSTRUKSIES NOUKEURIG
1. Write your examination number and centre number clearly in the spaces provided and attach your examination number sticker in the space provided. 2. Remember that your own name (or the name of your school) may not appear anywhere on or in this answer book. 3. Answer ALL questions in the spaces provided. 4. No pages may be torn from this answer book. 5. Read the instructions printed on your timetable carefully as well as any other instructions which may be given in each examination paper. 6. Candidates may not retain an answer book or remove it from the examination room. Answer books must be returned to the Invigilator at the end of the examination session. 7. Answers must be written in black/blue ink as distinctly as possible. Do not write in the margins. 8. 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. 9. Rule off through any work/rough work that must not be marked. 10. In the event that you use the additional space provided: 10.1 Write down the number of the question 10.2 Leave a line and rule off after your answer.	1. Skryf jou eksamennommer en sentrumnommer duidelik in die ruimtes soos verskaf en plak jou eksamennommeretiket in die ruimte soos verskaf. 2. Onthou dat jou eie naam (of die naam van jou skool) nie op of in hierdie antwoordeboek mag voorkom nie. 3. Beantwoord ALLE vrae in die ruimtes wat voorsien is. 4. Geen bladsye mag uit hierdie antwoordeboek geskeur word nie. 5. Lees die instruksies wat op jou eksamenrooster gedruk is sorgvuldig deur, asook enige ander instruksies wat in elke eksamenvraestel gegee word. 6. Geen antwoordeboek mag deur die kandidaat behou of uit die eksamenlokaal verwyder word nie. Antwoordeboeke moet aan die Toesighouer terugbesorg word aan die einde van die eksamensessie. 7. Skryf die antwoorde so duidelik moontlik met swart/blou ink. Moenie in die kantlyn skryf nie. 8. Dui die vrae wat jy beantwoord het aan op die voorblad van die antwoordeboek waar die punte aangebring word, deur 'n kringetjie te trek om die nommers van die vrae wat jy beantwoord het. 9. Trek 'n netjiese lyn deur enige werk/rofwerk wat nie nagesien moet word nie. 10. Ingeval jy die bykomende ruimte wat voorsien word, gebruik: 10.1 Skryf die nommer van die vraag neer 10.2 Laat 'n lyn oop en trek 'n lyn na jou antwoord.

QUESTION/VRAAG 1


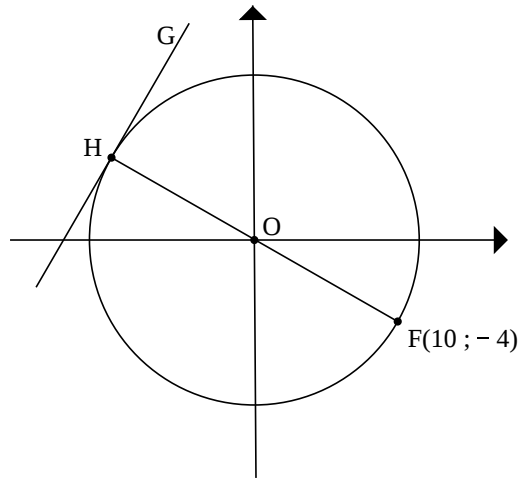
	Solution/Oplossing	Marks Punte
1.1		(3)
1.2		(2)
1.3		(5)

1.4		(2)
1.5		(4)
		[16]

[illegible]

QUESTION/VRAAG 2

2.1

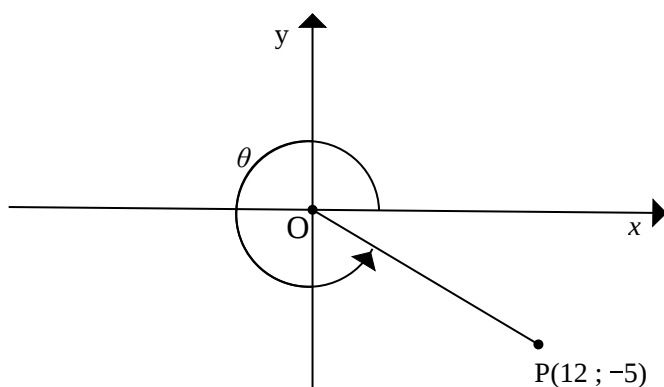


	Solution/Oplossing	Marks Punte
2.1.1		(2)
2.1.2		(2)
2.1.3		(4)

	Solution/ <i>Oplossing</i>	Marks <i>Punte</i>
2.2		(3)

[11]

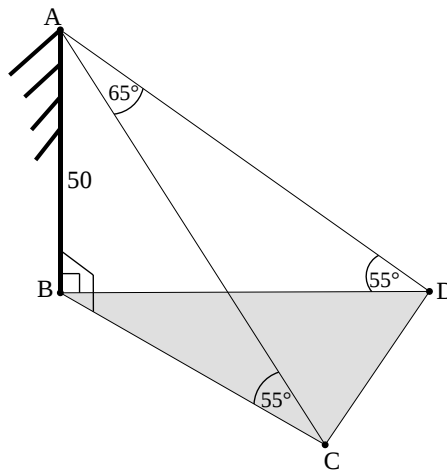
[illegible]

QUESTION/VRAAG 3

	Solution/Oplossing	Marks Punte
3.1.1		(1)
3.1.2		(3)
3.1.3		(2)
3.2		(3)
		[9]

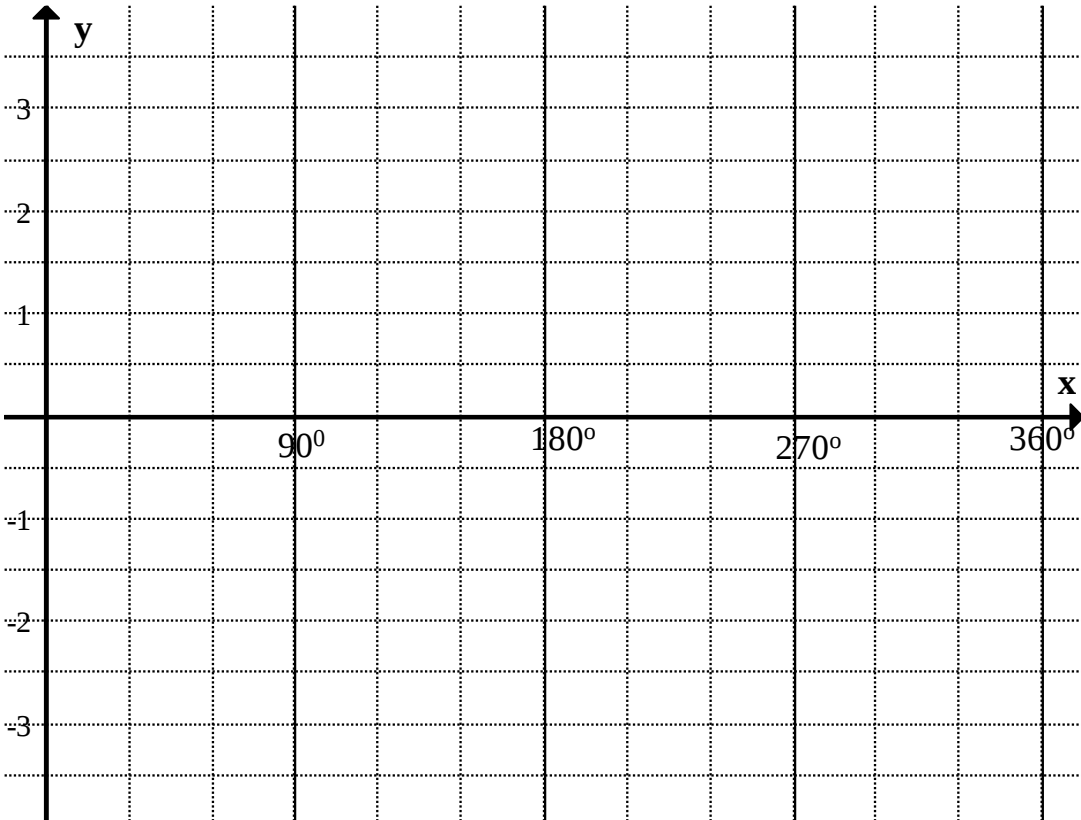
QUESTION/VRAAG 4

	Solution/Oplossing	Marks Punte
4.1		(7)
4.2		(1)
4.3		(4)
4.4		(4)
		[16]

QUESTION/VRAAG 5


	Solution/Oplossing	Marks Punte
5.1		(3)
5.2		(4)
5.3		(6)
		[13]

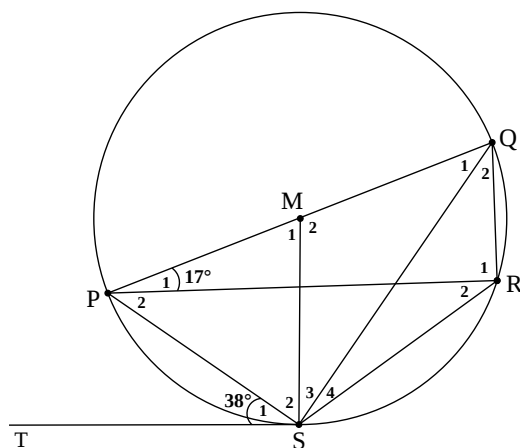
QUESTION/VRAAG 6

	Solution/Oplossing	Marks Punte
6.1		
		(6)
6.2		
		(1)
6.3		
		(1)
6.4		
		(2)
		[10]

QUESTION/VRAAG 7

	Solution/Oplossing	Marks Punte
7.1		
		(1)

7.2

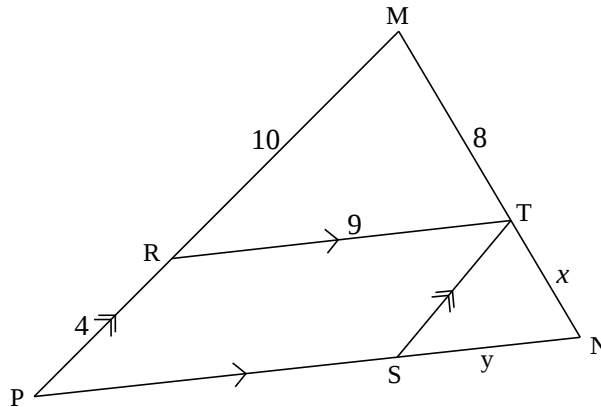


	Solution/Oplossing	Marks Punte
7.2.1		
		(2)
7.2.2		
		(2)
7.2.3		
		(2)
7.2.4		
		(5)
7.2.5		
		(1)
		[13]

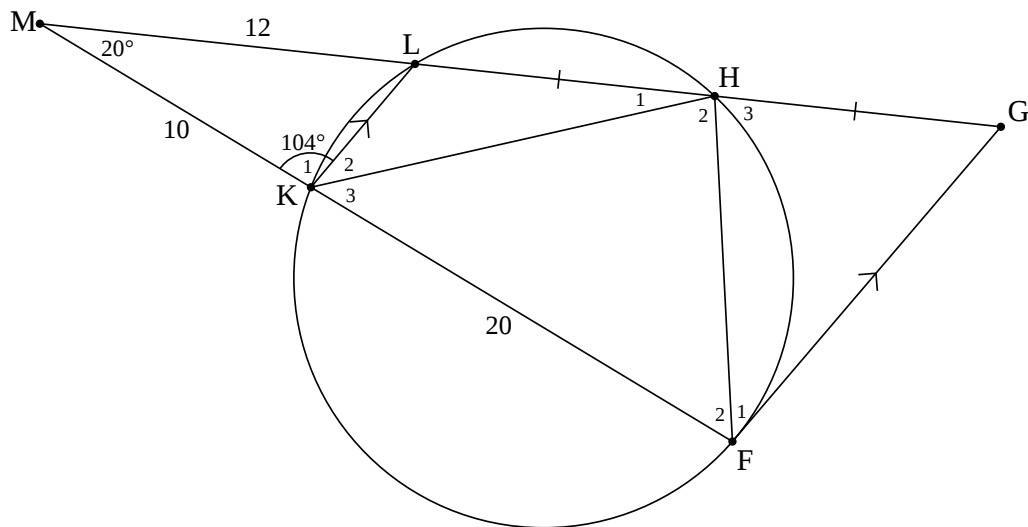
QUESTION/VRAAG 8

	Solution/Oplossing	Marks Punte
8.1		(1)

8.2



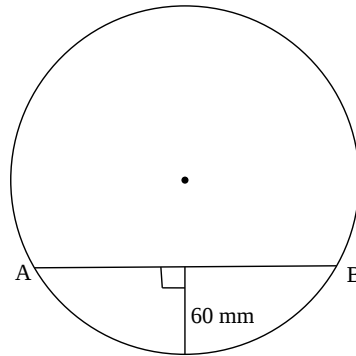
	Solution/Oplossing	Marks Punte
8.2.1		(3)
8.2.2		(2)
8.2.3		(3)
8.2.4		(4)
		[13]

QUESTION/VRAAG 9


	Solution/Oplossing	Marks Punte
9.1		(3)
9.2		(3)
9.3.1		(3)
9.3.2(a)		(3)
9.3.2(b)		(1)
		[13]

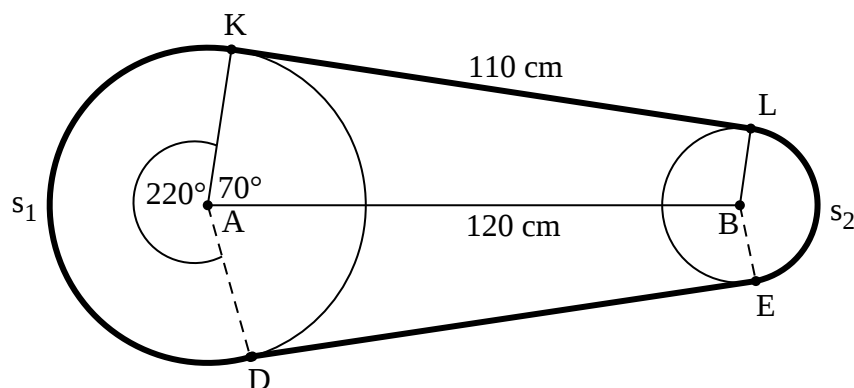
QUESTION/VRAAG 10

10.1



	Solution/Oplissing	Marks Punte
10.1		(4)
10.2.1		(4)
10.2.2		(3)

10.3

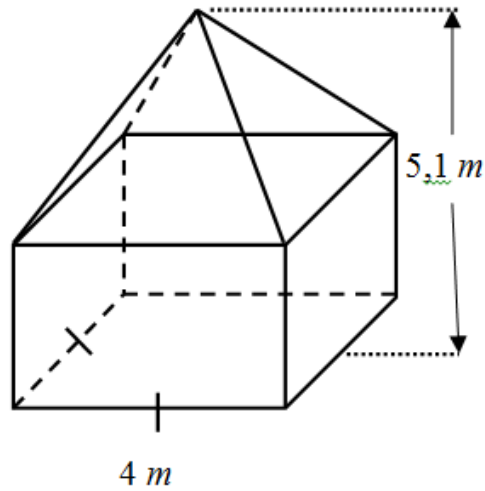


Where s_1 is the arc length of pulley A and s_2 is the arc length of pulley B.

	Solution/Oplossing	Marks Punte
10.3.1		(2)
10.3.2		(6)
		[19]

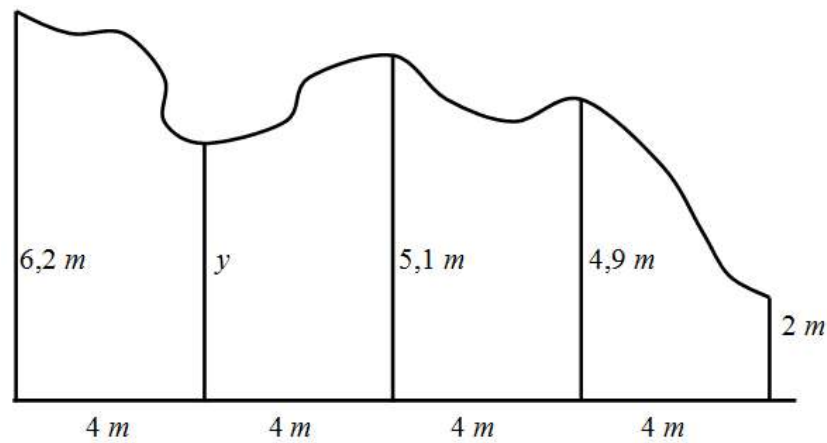
QUESTION 11

11.1



	Solution/Oplissing	Marks Punte
11.1.1		(6)
11.1.2		(5)
11.1.3		(2)

11.2



	Solution/Oplissing	Marks Punte
11.2		
		(4)
		[17]

[illegible]

[illegible]

TOTAL/TOTAAL: 150