education

Department of Education
FREE STATE PROVINCE

GRADE 7 / *GRAAD 7*

MATHEMATICS / *WISKUNDE*

MOCK PAPER 2 / OEFENVR*AESTEL 2*

NOVEMBER 2025

MARKS / *PUNTE*: 50

MEMORANDUM

This memorandum consists of 9 pages. / *Hierdie memorandum bestaan uit 9 bladsye.*

General marking notes:/*Algemene nasienriglyne:*

1. Give full marks for answers only, unless otherwise stated. / *Gee volpunte vir slegs die korrekte antwoord, tensy anders vermeld.*

2. Accept any alternative correct solution that is not included in the memorandum. / *Aanvaar enige ander korrekte oplossing wat nie in hierdie memorandum vervat word nie.*

3. Underline errors committed by learners and apply Consistent Accuracy when marking. / *Onderstreep foute wat deur leerlinge begaan word en pas Konstante Akkuraatheid toe.*

COGNITIVE LEVEL: / *KOGNITIEWE VLAK:*

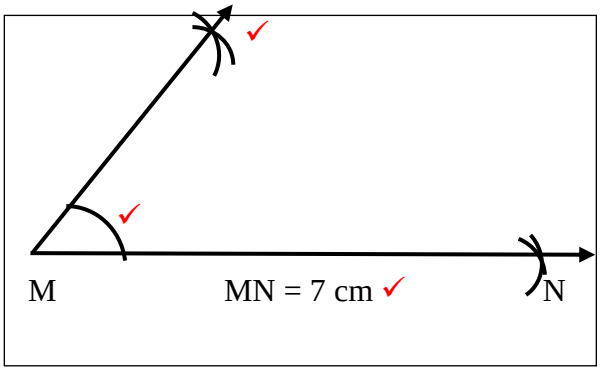
K ⟶ Knowledge/*Kennis*

RP ⟶ Routine Procedure/*Roetine Prosedure*

CP/*KP* ⟶ Complex Procedure/*Komplekse Prosedure*

PS/*PO* ⟶ Problem Solving/*Probleemoplossing*

QUESTION / *VRAAG*	ANSWERS/*ANTWOORDE*	CLARIFICATION NOTES/ *VERDUIDELIKING*	MARKS/ *PUNTE*	COGNITIVE LEVEL/ *KOGNITIEWE VLAK*
QUESTION 1 / *VRAAG 1*				
1.1.1	A set of points with a definite starting- point and an end-point. / 'n Stel punte met 'n definitiewe begin en eindpunt. ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
1.1.2	A set of points with no definite starting- point and endpoint. / 'n Stel punte met geen definitiewe begin of eindpont. ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
1.2	1.2.1 Radius/*Straal* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
	1.2.2 Sector/*Sektor* ✓	1 mark:correct answer / *1 punt: korrekte antwoord*	(1)	K
	1.2.3 Circumference/*Omtrek* ✓	1 mark:correct answer / *1 punt: korrekte antwoord*	(1)	K
1.3	5 units/*eenhede* × 2 = 10 units/*eenhede* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP

1.4		1 mark: each arch / *1 punt: elke boog* 1 mark: correct construction of angle / *1 punt: korrekte konstruksie van hoek*	(3)	RP
1.5	1.5.1 60° ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
	1.5.2 110° ✓	1mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
				[11]

QUESTION 2 / *VRAAG 2*				
2.1	2.1.1 z = 21° ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
	2.1.2 x = 159° ✓	1 mark: correct calculation / *1 punt: korrekte berekening* 1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
2.2	2.2.1 BC = Diameter / *Middellyn (Deursnee)* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
2.2	2.2.1 AC = Chord / *Koord* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K

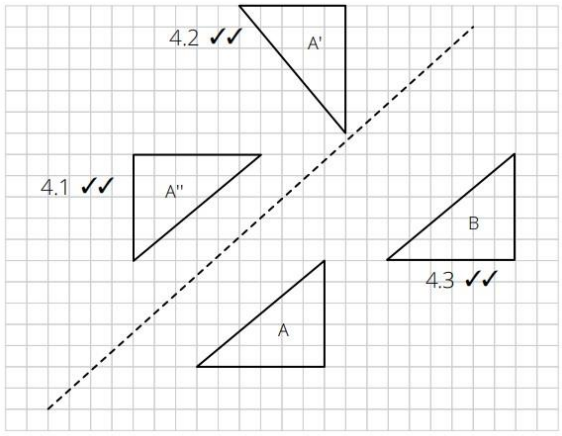
	2.2.2 Isosceles triangle / *Gelykbenige driehoek* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
	2.2.3 Right angle triangle / *Reghoekige driehoek* ✓ 90° ✓	1 mark: correct answer / *1 punt: korrekte antwoord* 1 mark: correct answer / *1 punt: korrekte antwoord*	(1) (1)	K K
				[07]

QUESTION 3 / *VRAAG 3*				
3.1	P = (4 + 5 + 6 + 7 + 6 + 5 + 4 + 17) cm ✓✓ = 54 cm ✓ CA/*KA*	2 marks: correct calculation / *2 pune: korrekte berekening* 1 mark: correct answer / 1 punt: korrekte antwoord	(3)	RP
3.2	$A = l \times b$ ✓ $= 7 \text{ cm} \times 2{,}5 \text{ cm}$ ✓ $= 17{,}5 \text{ cm}^2$ ✓	1 mark: correct formula / *1 punt: korrekte formule* 1 mark: correct substitution / *1 punt: korrekte vervanging* 1 mark: correct answer / *1 punt: korrekte antwoord*	(3)	RP

3.3	$A = \frac{1}{2}\,b \times h$ ✓ $A = \frac{1}{2} \times 14\text{ cm} \times 12{,}1\text{ cm}$ ✓ $= 7\text{ cm} \times 12{,}1\text{ cm}$ $= 84{,}7\text{ cm}^2$ ✓	1 mark: correct formula / *1 punt: korrekte formule* 1 mark: correct substitution / *1 punt: korrekte vervanging* 1 mark: correct answer / *1 punt: korrekte antwoord*	(3)	RP
				[9]

QUESTION 4 / *VRAAG 4*				
4.1	2,5 m ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	K
4.2	$S_A = 2(l \times b) + 2(l \times h) + 2(b \times h)$ $S_A = 2(6 \times 5\ cm) + 2(6 \times 4\ cm) + 2(5 \times 4\ cm)$ ✓ $S_A = 2(30\ cm^2) + 2(24\ cm^2) + 2(20\ cm^2)$ ✓ $S_A = 60\ cm^2 + 48\ cm^2 + 40\ cm^2$ $S_A = 148\ cm^2$ ✓	1 mark: correct substitution / *1 punt: korrekte vervanging* 1 mark correct method / 1 *punt: korrekte metode* 1 mark: correct answer / *1 punt: korrekte antwoord*	(3)	CP/*KP*

4.3	V = s × s × s ✓ = 6 cm x 6 cm x 6 cm ✓ = 216 cm^3 ✓	1 mark: correct formula / *1 punt: korrekte formule* 1 mark: for the product / *1 punt: vir die produk* 1 mark: correct answer / *1 punt: korrekte antwoord*	(3)	RP
4.4	12 triangles / *12 driehoeke* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	PO/*PS*
4.5	10 cm^2 ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	PO/*PS*
				[9]

QUESTION 5 / *VRAAG 5*				
5.1			(6)	CP/*KP*
				[6]

QUESTION 6 / *VRAAG 6*				
6.1	6.1.1 21 learners/*leerders* ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
	6.1.2 $\frac{48}{\cancel{50}\ 1} \times \frac{\cancel{100}\ 2}{1}$ = 96% ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
	6.1.3 Range = Maximum – Minimum / *Omvang = Maksimum – Minimum* = 48 – 11 = 37 ✓	1 mark: correct answer / *1 punt: korrekte antwoord*	(1)	RP
	6.1.4 626 ÷ 21✓ = 29,8 ✓	1 mark: correct method / *1 punt: korrekte metode* 1 mark: correct answer / *1 punt: korrekte antwoord*	(2)	RP
	6.1.5 $\frac{16}{21} - \frac{5}{21}$ ✓ = $\frac{11}{21}$ ✓ = 0,52 ✓	2 marks: correct method / *2 punte: korrekte metode* 1 mark: correct decimal / *1 punt: korrekte desimaal*	(3)	CP/*KP*
				[08]
			TOTAL / *TOTAAL:*	**50**

COGNITIVE LEVELS/ *KOGNITIEWE VLAKKE*			
COGNITIVE LEVEL/ *KOGNITIEWE VLAK*	**PERCENTAGE/*PERSENTASIE***	**EXPECTED MARKS/ *VERWAGTE PUNTE***	**ACTUAL MARKS/ *WERKLIKE PUNTE***
Knowledge/Kennis	25%	12 or 13	13
Routine procedure/ *Roetine prosedure*	45%	22 or 23	23
Complex procedure/ *Komplekse prosedure*	20%	10	12
Problem solving/ *Probleemoplossing*	10%	5	2
TOTAL/*TOTAAL*:	**100%**	**50**	**50**