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**NATIONAL SENIOR CERTIFICATE/
*NASIONALE SENIOR SERTIFIKAAT***

GRADE/*GRAAD* 12

MATHEMATICS P2/*WISKUNDE V2*

SEPTEMBER 2021(2)

MARKING GUIDELINES/*NASIENRIGLYNE*

MARKS/*PUNTE*: 150

**These marking guidelines consist of 24 pages.
*Hierdie nasienriglyne bestaan uit 24 bladsye.***

NOTE:

- If a candidate answers a question TWICE, only mark the FIRST attempt.
- If a candidate has crossed out an attempt of a question and not redone the question, mark the crossed out version.
- Consistent accuracy applies in ALL aspects of the marking memorandum. Stop marking at the second calculation error.
- Assuming answers/values in order to solve a problem is NOT acceptable.

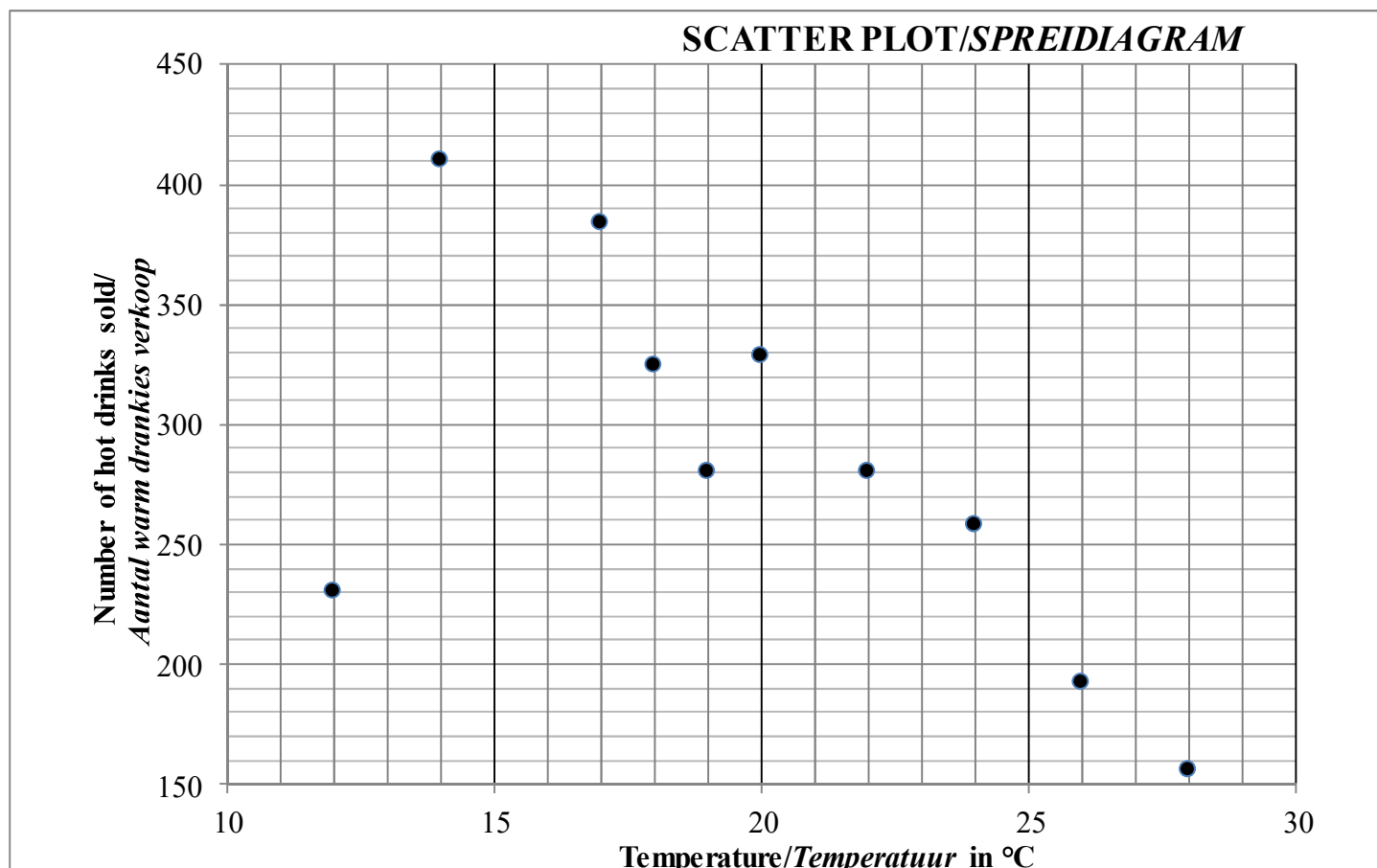
NOTA:

- *As 'n kandidaat 'n vraag TWEE KEER beantwoord, merk slegs die EERSTE poging.*
- *As 'n kandidaat 'n antwoord van 'n vraag doodtrek en nie oordoen nie, sien die doodgetrekte poging na.*
- *Volgehoue akkuraatheid word in ALLE aspekte van die memorandum toegepas. Hou op nasien by die tweede berekeningsfout.*
- *Om antwoorde/waardes te aanvaar om 'n probleem op te los, word NIE toegelaat nie.*

GEOMETRY • MEETKUNDE	
S	A mark for a correct statement (A statement mark is independent of a reason)
	<i>'n Punt vir 'n korrekte bewering ('n Punt vir 'n bewering is onafhanklik van die rede)</i>
R	A mark for the correct reason (A reason mark may only be awarded if the statement is correct)
	<i>'n Punt vir 'n korrekte rede ('n Punt word slegs vir die rede toegeken as die bewering korrek is)</i>
S/R	Award a mark if statement AND reason are both correct
	<i>Ken 'n punt toe as die bewering EN rede beide korrek is</i>

QUESTION/VRAAG 1

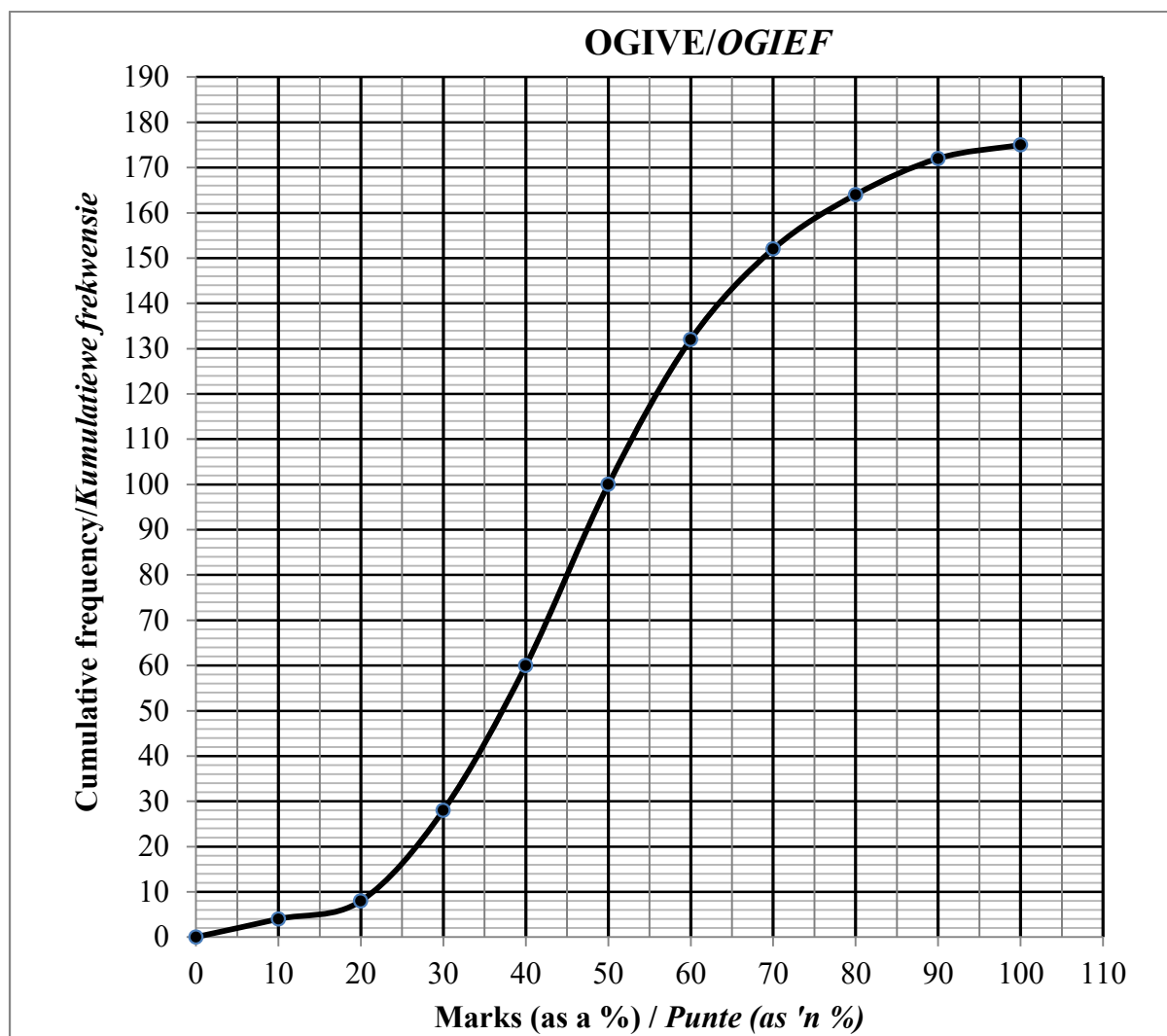
Temperature/ Temperatuur (in °C)	14	24	26	18	20	28	22	17	12	19
Number of hot drinks sold Aantal warm drankies verkoop	410	258	192	324	328	156	280	384	230	280



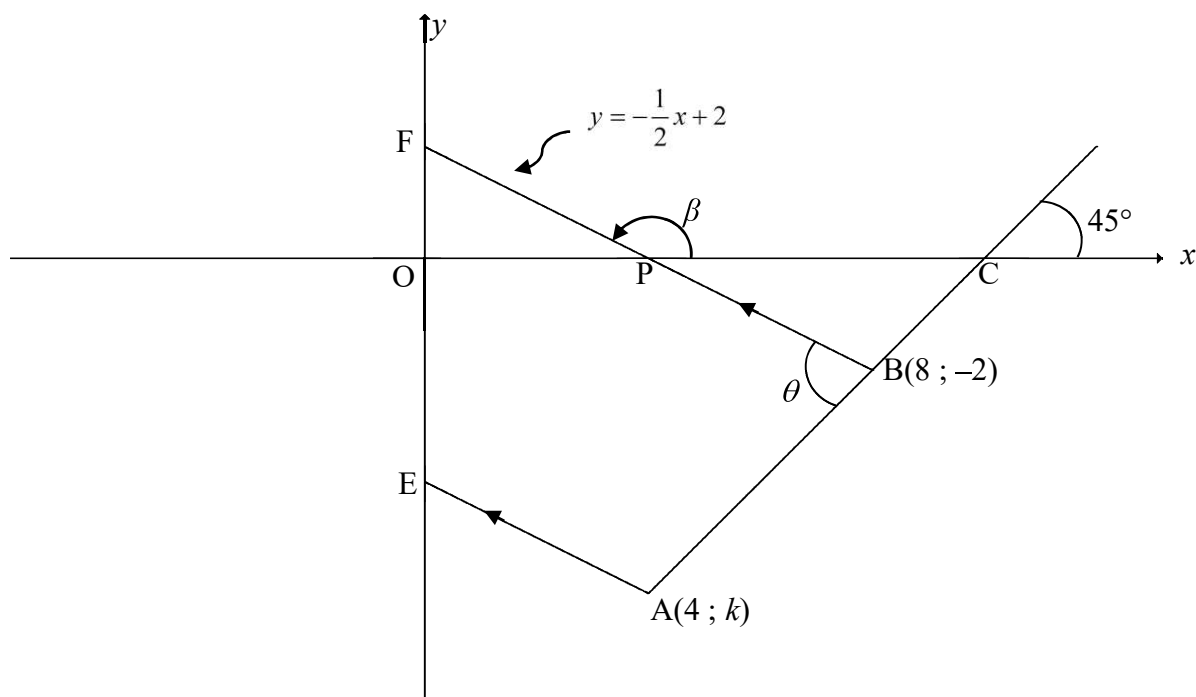
1.1	As the temperature increases the number of hot drinks sold decreases. / <i>Soos die temperatuur toeneem, neem die verkope van die warm drankies af.</i> OR As the temperature decreases the number of hot drinks sold increases. / <i>Soos die temperatuur afneem, neem die verkope van die warm drankies toe.</i>	✓ answer (1)
1.2	$a = 489,47$ $b = -10,37$ $\hat{y} = 489,47 - 10,37x$	✓ value of a ✓ value of b ✓ equation (3)

1.3	$\hat{y} = 489,47 - 10,37x$ $= 489,47 - 10,37(17)$ $= 313,18$ Number of hot drinks sold = 314 Number of litres of milk $= \frac{314}{8}$ $= 39,25$ $= 40 \text{ boxes of } 1\ell$	✓ substitution ✓ 314 (accept 313) ✓ answer as N_0 (3)
1.4	The outlier is the point (12; 230).	✓ (12; 230) (1)
		[8]

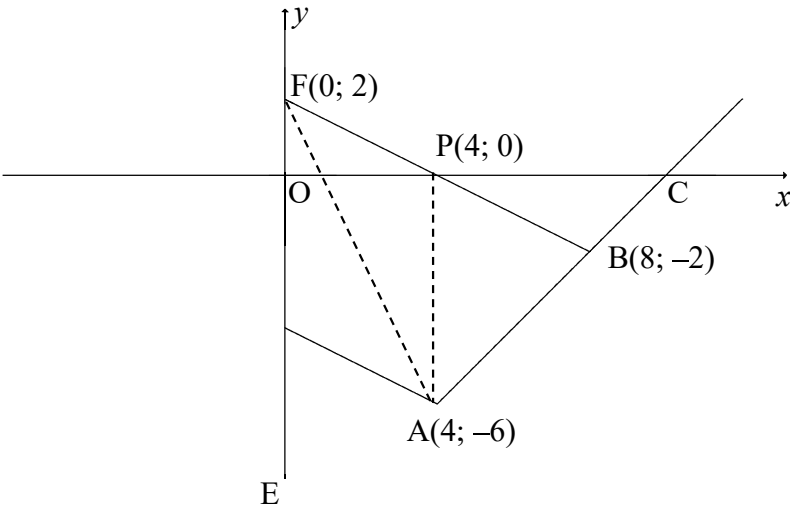
QUESTION/VRAAG 2

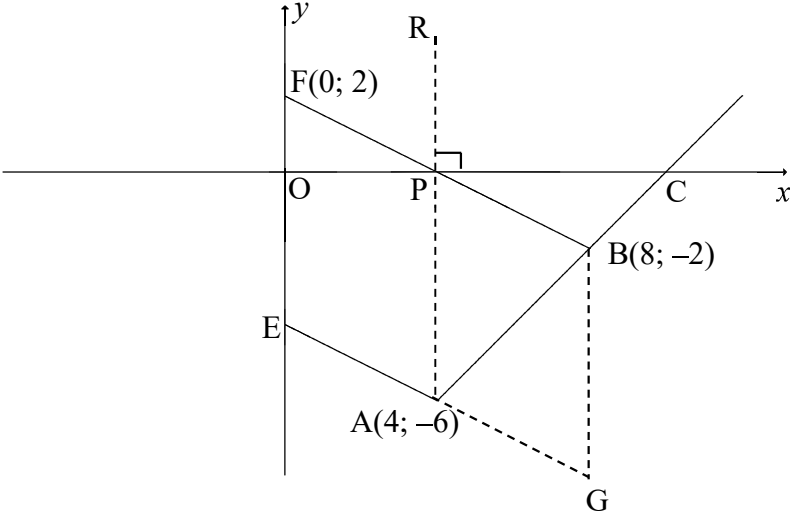


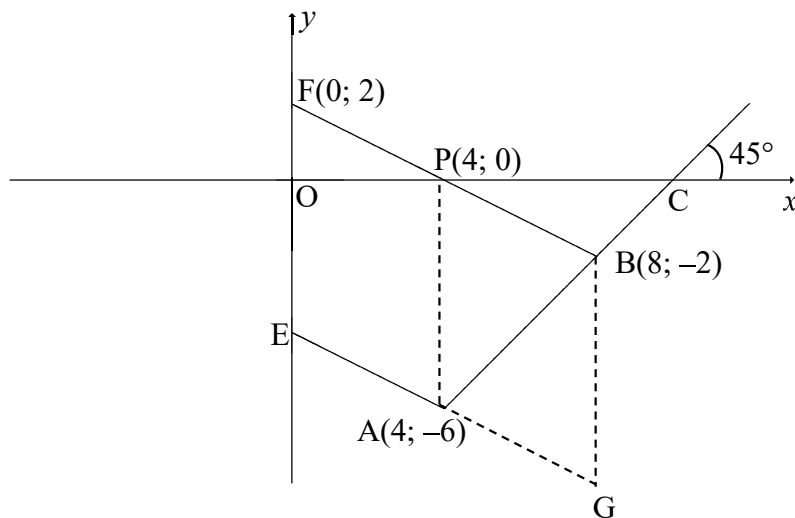
2.1.1	175	✓ answer (1)
2.1.2	$40 \leq x < 50$ OR $40 < x \leq 50$	✓ answer (1)
2.1.3	$175 - 158 = 17$	✓ 158 (accept 156 to 160) ✓ answer (accept 15 to 19) (2)
2.2.1	$\bar{x} = 74,87$	✓✓ answer (2)
2.2.2	$\sigma = 16,12$	✓ answer (1)
2.2.3	$\bar{x} + \sigma = 74,87 + 16,12 = 90,99$ 3 learners	✓ 90,99 ✓ answer (2)

QUESTION/VRAAG 3

3.1	$m_{AB} = \tan 45^\circ = 1$	$\checkmark m_{AB} = \tan 45^\circ = 1$ (1)
3.2	$y = x + c$ $-2 = 8 + c$ $c = -10$ $y = x - 10$ $k = 4 - 10$ $k = -6$ OR $\tan \theta = m_{AB}$ $1 = \frac{k - (-2)}{4 - 8}$ $\frac{k + 2}{-4} = 1$ $k = -4 - 2$ $k = -6$	$\checkmark$ equation of AB $\checkmark$ substitute A in equation (2) $\checkmark$ substitute A & B into gradient formula $\checkmark$ equate to 1 (2)

3.3	$m_{FB} = m_{EA} = -\frac{1}{2}$ [FB EA] $y = -\frac{1}{2}x + c$ $-6 = -\frac{1}{2}(4) + c$ OR $y - (-6) = -\frac{1}{2}(x - 4)$ $\therefore y = -\frac{1}{2}x - 4$	$\checkmark m_{EA} = -\frac{1}{2}$ $\checkmark$ substitution of (4; -6) $\checkmark$ equation (3)
3.4.1	$\tan \beta = -\frac{1}{2}$ $\beta = 153,43^\circ$ $\theta = 26,565^\circ + 45^\circ$ [ext < of Δ] $= 71,57^\circ$	$\checkmark \tan \beta = -\frac{1}{2}$ $\checkmark$ value of β $\checkmark$ value of θ (3)
3.4.2	$F(0; 2)$ $B(8; -2)$ $BF = \sqrt{(8-0)^2 + (-2-2)^2}$ $BF = \sqrt{80} = 4\sqrt{5}$	$\checkmark F(0; 2)$ $\checkmark$ substitution $\checkmark$ answer (3)
3.4.3	 $0 = -\frac{1}{2}x + 2$ $x = 4$ $\therefore P(4; 0)$ $\therefore PA \parallel y\text{-axis}$ Area ΔABF = area ΔABP + area ΔAPF Area $\Delta ABF = \frac{1}{2}(6)(4) + \frac{1}{2}(6)(4)$ Area $\Delta ABF = 24 \text{ units}^2$ OR	$\checkmark P(4; 0)$ $\checkmark$ area of ΔABP $\checkmark$ area of ΔAPF $\checkmark$ answer (4)

	$A(4; -6)$ $B(8; -2)$ $AB = \sqrt{(8-4)^2 + (-2-(-6))^2}$ $AB = \sqrt{32} = 4\sqrt{2}$ $\text{Area of } ABF = \frac{1}{2}(AB)(BF)\sin \hat{ABF}$ $= \frac{1}{2}(\sqrt{32})(\sqrt{80})\sin 71,57^\circ$ $= 24\text{units}^2$	$\checkmark AB = \sqrt{32} = 4\sqrt{2}$ $\checkmark$ area formula $\checkmark$ substitution into area formula $\checkmark$ answer (4)
3.5	 $RA \parallel y\text{-axis}$ $\hat{CPB} = 26,57^\circ$ $\hat{RPB} = 90^\circ + 26,57^\circ$ $\hat{RPB} = 116,57^\circ$ $PB \parallel AG$ $\therefore \hat{PAG} = \hat{RPB} = 116,57^\circ$ [corresp $\angle$s; $PB \parallel AG$] OR $\hat{OFP} = 153,43^\circ - 90^\circ$ [ext $\angle$ of Δ] $\hat{OFP} = 63,43^\circ$ $\hat{FEA} = 180^\circ - 63,43^\circ$ [co-interior $\angle$ s; $FB \parallel EA$] $= 116,57^\circ$ $\hat{PAG} = 116,57^\circ$ [corresp $\angle$ s; $FE \parallel PA$]	$\checkmark \hat{CPB} = 26,57^\circ$ $\checkmark \hat{RPB} = 90^\circ + \hat{CPB}$ $\checkmark \hat{RPB}$ $\checkmark$ answer of $\hat{PAG}$ (4)
	$\hat{OFP} = 63,43^\circ$ $\hat{FEA} = 180^\circ - 63,43^\circ$ $= 116,57^\circ$ $\hat{PAG} = 116,57^\circ$ [corresp $\angle$ s; $FE \parallel PA$]	$\checkmark \hat{OFP} = 63,43^\circ$ $\checkmark \hat{FEA} = 180^\circ - 63,43^\circ$ $\checkmark = 116,57^\circ$ $\checkmark$ answer of $\hat{PAG}$ (4)



PA || y-axis

PCA = 45° [vert opp ∠s =]

$$\hat{PAC} = 45^\circ \quad [\angle s \text{ of } \Delta]$$

PA || BG

$$\hat{BAG} = \theta = 71,57^\circ \quad [\text{alt } \angle\text{s}; \text{ PA} \parallel \text{BG}]$$

$$\hat{PAG} = 45^\circ + 71,57^\circ$$

$$\hat{PAG} = 116,57^\circ$$

✓ $\hat{APC} = 90^\circ$ OR $AP = PC$

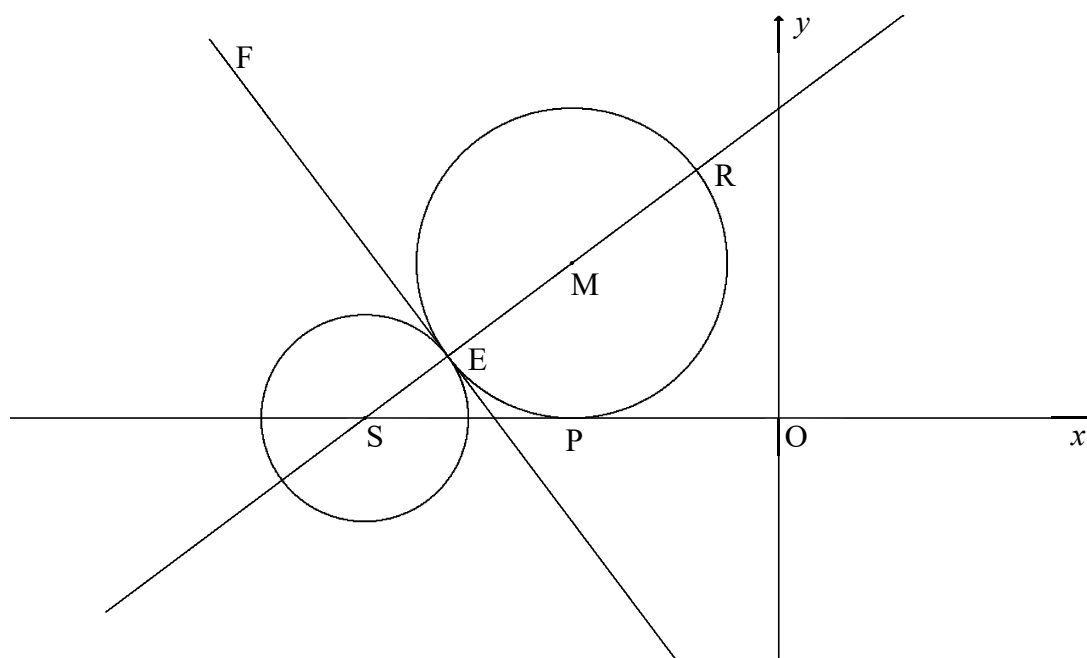
✓ $\hat{PAC} = 45^\circ$

✓ $\hat{\text{BAG}} = \theta = 71,57^\circ$

✓ answer of PÂG

(4)

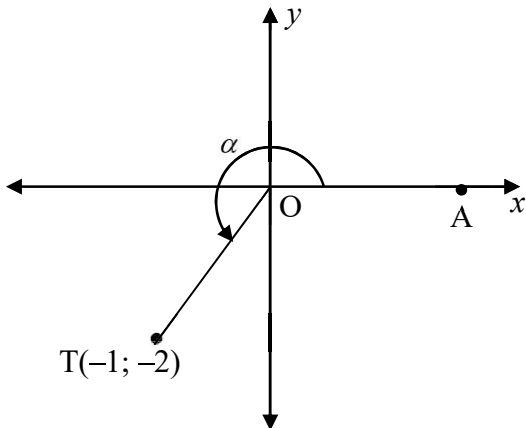
[20]

QUESTION/VRAAG 4

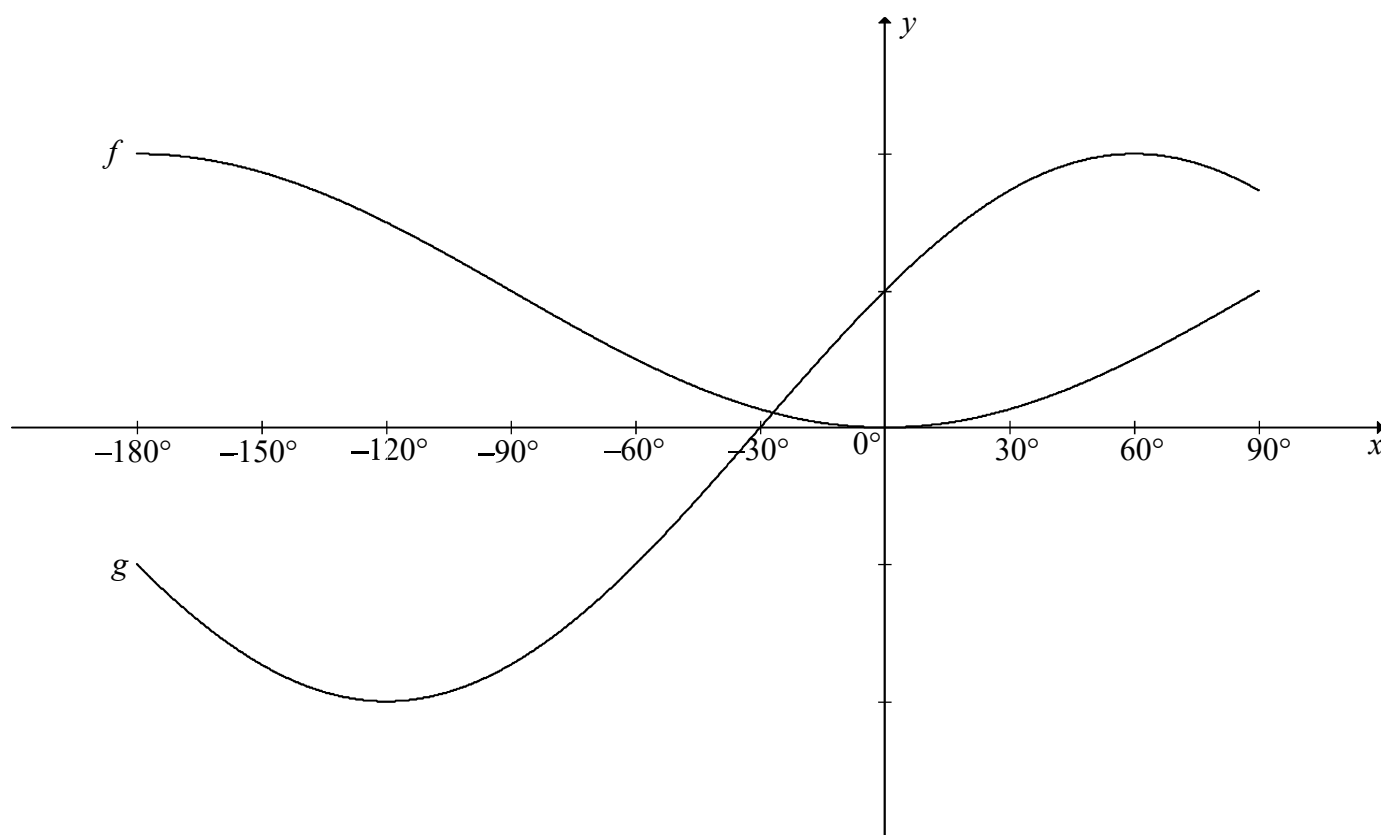
4.1.1	$S(-8; 0)$	✓ x -value ✓ y -value (2)
4.1.2	$r = 2$ $\therefore$ diameter = 4 units	✓ $r = 2$ (1)
4.2.1	ER = 6 units EM = 3 units	✓ length of ER ✓ answer (2)
4.2.2	$S(-8; 0); R\left(-\frac{8}{5}; \frac{24}{5}\right)$ $m_{SR} = \frac{0 - (\frac{24}{5})}{-8 - (-\frac{8}{5})}$ $= \frac{3}{4}$ $m_{FE} = \frac{-4}{3} \text{ [tan } \perp \text{ rad]}$	✓ substitution ✓ m_{SM} ✓ answer (3)
4.2.3	EM = MP = 3 units [radii] SM = 5 units $SP^2 = 5^2 - 3^2$ [Pythagoras] SP = 4 units $\therefore P(-4; 0)$ $\therefore M(-4; 3)$	✓ MP = 3 units ✓ length of SM ✓ length of SP ✓ coordinates of M (4)

4.2.4	$\frac{x + \left(-\frac{8}{5}\right)}{2} = -4 \quad \text{and} \quad \frac{y + \frac{24}{5}}{2} = 3$ $x = \frac{-32}{5} \qquad y = \frac{6}{5}$ $\therefore E\left(\frac{-32}{5}; \frac{6}{5}\right)$ OR By translation: $E\left(\frac{-32}{5}; \frac{6}{5}\right)$	$\checkmark x_E \quad \checkmark y_E$ (2)
4.3	$K(-5; -3)$ $SK = \sqrt{(-8 - (-5))^2 + (0 - (-3))^2}$ $SK = \sqrt{18}$ $SK = 3\sqrt{2}$ $SK > 3$ (radius of circle) $\therefore S$ lies outside the circle	$\checkmark x\text{-value} \quad \checkmark y\text{-value}$ $\checkmark$ substitution $\checkmark$ length of SK $\checkmark$ conclusion (5)
		[19]

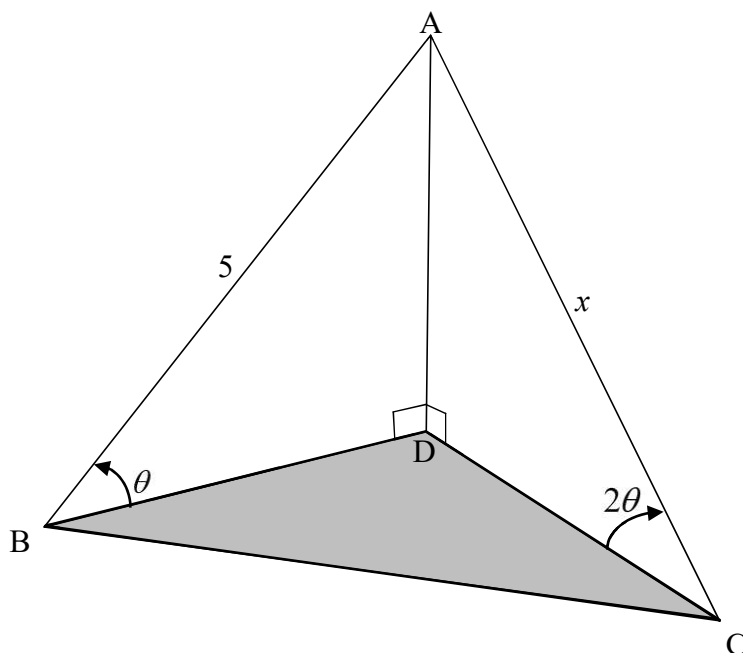
QUESTION/VRAAG 5

5.1.1	 $\tan \alpha = \frac{-2}{-1} = 2$	✓ answer (1)
5.1.2	$OT = \sqrt{(-1)^2 + (-2)^2} = \sqrt{5}$ $\cos \alpha = \frac{-1}{\sqrt{5}}$	✓ $OT = \sqrt{5}$ ✓ answer (2)
5.1.3	$\begin{aligned} \cos(\alpha + 45^\circ) &= \cos \alpha \cos 45^\circ - \sin \alpha \sin 45^\circ \\ &= \left(\frac{-1}{\sqrt{5}}\right)\left(\frac{\sqrt{2}}{2}\right) - \left(\frac{-2}{\sqrt{5}}\right)\left(\frac{\sqrt{2}}{2}\right) \\ &= \frac{-\sqrt{2} + 2\sqrt{2}}{2\sqrt{5}} \\ &= \frac{\sqrt{2}}{2\sqrt{5}} \end{aligned}$ OR $\begin{aligned} \cos(\alpha + 45^\circ) &= \cos \alpha \cos 45^\circ - \sin \alpha \sin 45^\circ \\ &= \left(\frac{-1}{\sqrt{5}}\right)\left(\frac{1}{\sqrt{2}}\right) - \left(\frac{-2}{\sqrt{5}}\right)\left(\frac{1}{\sqrt{2}}\right) \\ &= \frac{-1 + 2}{\sqrt{10}} \\ &= \frac{1}{\sqrt{10}} \end{aligned}$	✓ expansion ✓ substitution of $\sin \alpha$ ✓ special angle ratios ✓ answer (4) ✓ expansion ✓ substitution of $\sin \alpha$ ✓ special angle ratios ✓ answer (4)

5.2	$2 \sin(-20^\circ) \cdot \sin 160^\circ - \cos 40^\circ$ $= 2(-\sin 20^\circ) \cdot \sin 20^\circ - \cos 40^\circ$ $= -2 \sin^2 20^\circ - (1 - 2 \sin^2 20^\circ)$ $= -1$	$\checkmark -\sin 20^\circ \checkmark \sin 20^\circ$ $\checkmark 1 - 2 \sin^2 20^\circ$ $\checkmark$ answer (4)
5.3.1	$3 \cos x \cdot \sin x + \tan x \cdot \cos^2(180^\circ - x)$ $= 3 \cos x \cdot \sin x + \tan x \cdot (-\cos x)^2$ $= 3 \cos x \cdot \sin x + \frac{\sin x}{\cos x} \cdot \cos^2 x$ $= 4 \cos x \cdot \sin x$ $= 2 \sin 2x$	$\checkmark$ reduction $\checkmark$ identity $\checkmark$ simplification $\checkmark$ single ratio (4)
5.3.2	$y \in [-2; 2]$	$\checkmark$ critical values $\checkmark$ notation (2)
5.4	$\frac{\cos 3x}{\cos x} = 4 \cos^2 x - 3$ $\text{LHS} = \frac{\cos 3x}{\cos x} = \frac{\cos(2x + x)}{\cos x}$ $= \frac{\cos 2x \cos x - \sin 2x \sin x}{\cos x}$ $= \frac{(2 \cos^2 x - 1) \cos x - 2 \sin x \cos x \sin x}{\cos x}$ $= 2 \cos^2 x - 1 - 2 \sin^2 x$ $= 2 \cos^2 x - 1 - 2(1 - \cos^2 x)$ $= 2 \cos^2 x - 1 - 2 + 2 \cos^2 x$ $= 4 \cos^2 x - 3$ $= \text{RHS}$	$\checkmark$ compound identity $\checkmark 2 \cos^2 x - 1$ $\checkmark 2 \sin x \cos x$ $\checkmark 1 - \cos^2 x$ $\checkmark$ expansion (5)
5.5	$3^{2 \tan x} - 3^{\tan x + 1} = 54$ $3^{2 \tan x} - 3 \cdot 3^{\tan x} - 54 = 0$ $(3^{\tan x} - 9)(3^{\tan x} + 6) = 0$ $3^{\tan x} = 3^2 \quad \text{or} \quad 3^{\tan x} = -6$ $\tan x = 2 \quad \text{no solution}$ $\therefore x = 63,43^\circ + k \cdot 180^\circ; k \in \mathbb{Z}$ OR $\therefore x = 63,43^\circ + k \cdot 360^\circ; k \in \mathbb{Z} \quad \text{or} \quad x = 243,43^\circ + k \cdot 360^\circ; k \in \mathbb{Z}$	$\checkmark$ standard form $\checkmark$ factors $\checkmark$ both equations $\checkmark \tan x = 2$ $\checkmark x = 63,43^\circ + k \cdot 180^\circ; k \in \mathbb{Z}$ (5) OR $\checkmark x = 63,43^\circ + k \cdot 360^\circ; k \in \mathbb{Z}$ $\checkmark \& 243,43^\circ + k \cdot 360^\circ; k \in \mathbb{Z}$ (5)
		[27]

QUESTION/VRAAG 6

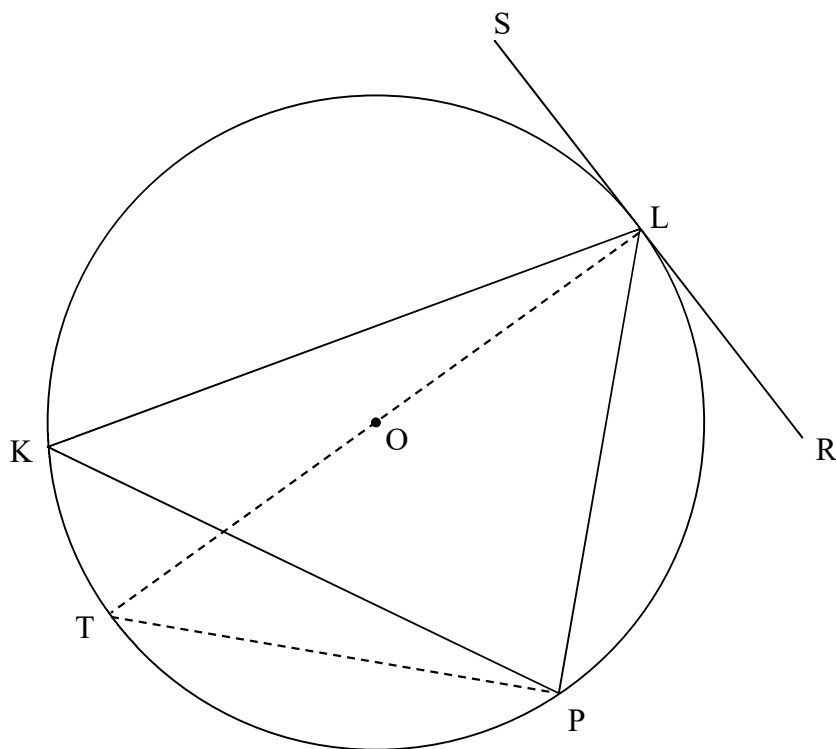
6.1.1	$x \in [-30^\circ; 90^\circ]$	✓ endpoints ✓ notation (2)
6.1.2	$x = -180^\circ$ or -60°	✓ -180° ✓ -60° (2)
6.2	$f(x) = -\cos(x+90^\circ) + 1$ $= \sin x + 1$	✓ $\cos(x+90^\circ)$ ✓ answer (2)
		[6]

QUESTION/VRAAG 7

7.1	$\sin \theta = \frac{AD}{5}$ $AD = 5 \sin \theta$ $\sin 2\theta = \frac{AD}{x}$ $AD = x \sin 2\theta$ $= x \cdot 2 \sin \theta \cos \theta$ $x \cdot 2 \sin \theta \cos \theta = 5 \sin \theta$ $x = \frac{5 \sin \theta}{2 \sin \theta \cos \theta}$ $= \frac{5}{2 \cos \theta}$	✓ trig ratio ✓ trig ratio ✓ $2 \sin \theta \cos \theta$ ✓ equating AD ✓ x as subject (5)
7.2	$BC^2 = 5^2 + \left(\frac{5}{2 \cos 30^\circ} \right)^2 - 2(5) \left(\frac{5}{2 \cos 30^\circ} \right) \cdot \cos 112^\circ$ $= 44,147$ $BC = 6,64 \text{ units}$	✓ use area rule correctly ✓ substitution ✓ answer (3)
		[8]

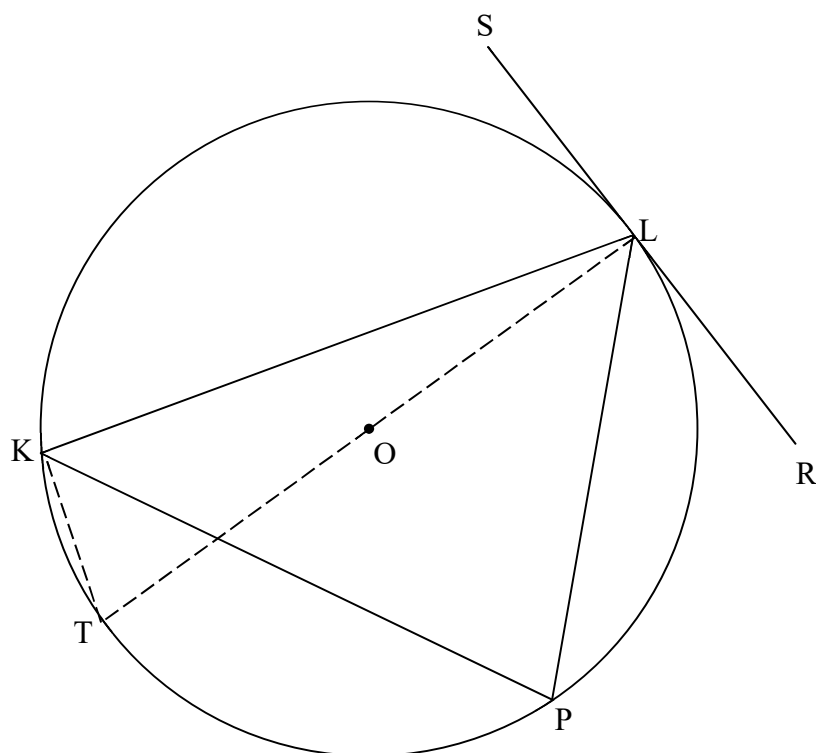
QUESTION/VRAAG 8

8.1



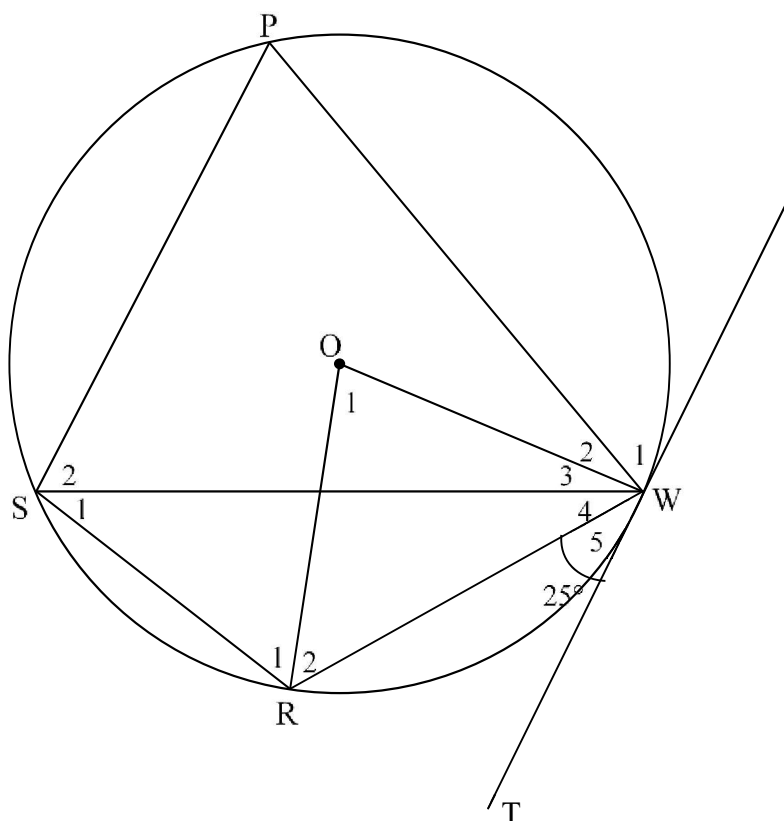
8.1	Construction: Draw diameter LT and draw TP <i>Konstruksie: Trek middellyn LT en verbind TP</i> $\hat{S}LK = 90^\circ - \hat{T}LK$ [radius $\perp$ tangent/raaklyn] $\hat{T}PL = 90^\circ$ [$\angle$ in semi-circle/semi-sirkel] $\therefore \hat{K}PL = \hat{P} = 90^\circ - \hat{T}PK$ $= 90^\circ - \hat{T}LK$ [$\angle$s same segment/$\angle$e dieselfde segment] $\therefore \hat{S}LK = \hat{P}$	✓Constr ✓S ✓R ✓S /R ✓S ✓R (6)
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OR

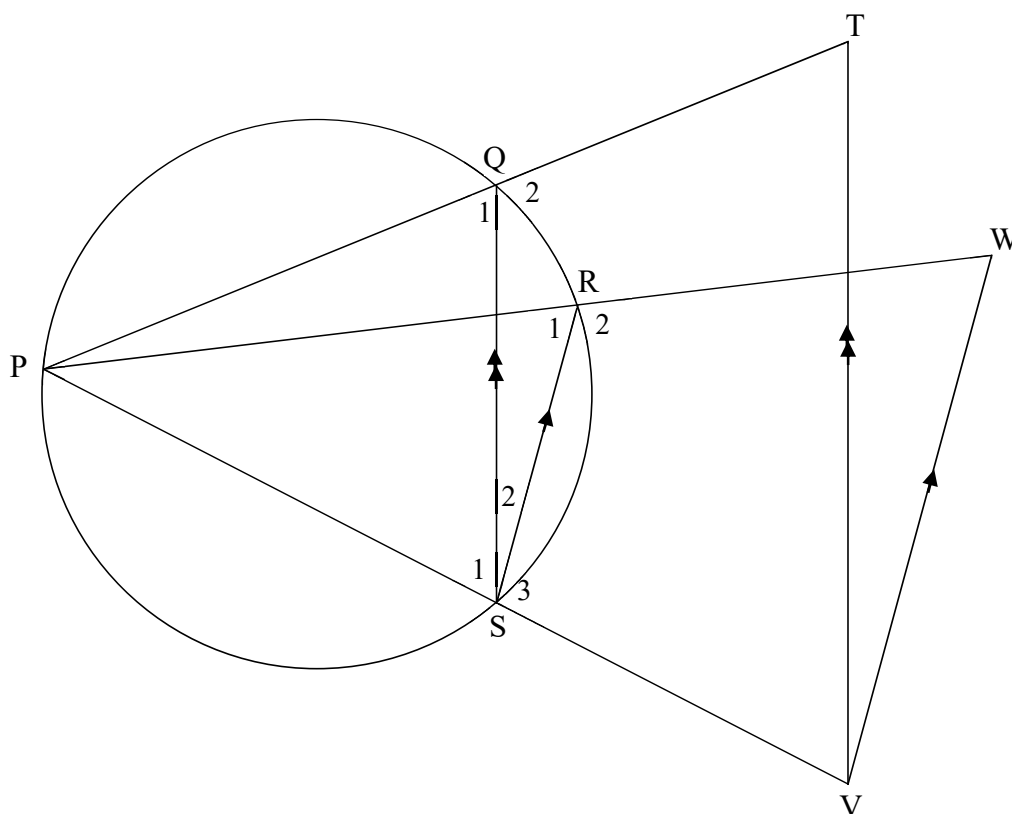


8.1	Construction: Draw diameter LT and draw KT <i>Konstruksie: Trek middellyn LT en verbind KT</i> $\hat{S}LK = 90^\circ - \hat{T}LK$ [radius $\perp$ tangent/raaklyn] $\hat{L}KT = 90^\circ$ [$\angle$ in half circle/semi-sirkel] $\therefore \hat{P} = \hat{K}TL$ [$\angle$s same segment/$\angle$e dieselfde segment] $= 90^\circ - \hat{T}LK$ $\therefore \hat{S}LK = \hat{P}$	✓ construction ✓ S / R ✓ S ✓ R ✓ S ✓ S / R (6)
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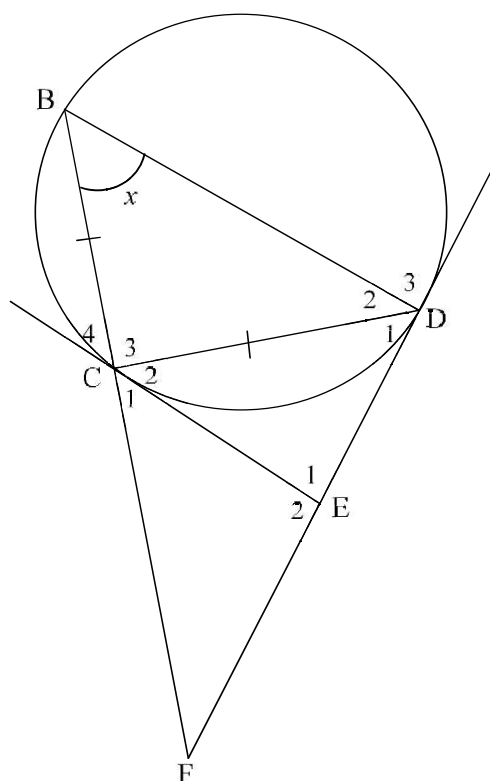
8.2



8.2.1(a)	$\hat{S}_1 = 25^\circ$	[tan chord theorem/ $\angle$ tussen raaklyn en koord]	✓ S ✓ R	(2)
8.2.1(b)	$\hat{O}_1 = 50^\circ$	[$\angle$ at centre = $2 \times \angle$ at circumference / <i>midpts. $\angle$ = $2 \times$ omtreks $\angle$</i>]	✓ S ✓ R	(2)
8.2.1(c)	$\hat{R}_2 = \hat{W}_3 + \hat{W}_4 = 65^\circ$ $\hat{P} = 60^\circ$ $\hat{R}_1 = 55^\circ$	[$\angle$ s opp = radii / $\angle$ e teenoor = <i>radiusse</i>] [$\angle$ s of equilateral Δ / $\angle$ e van gelyksydige Δ] [opp $\angle$ of cyclic quad / teenoorst. $\angle$ e van kvh]	✓ S ✓ R ✓ S / R ✓ S ✓ R	(5)
8.2.2	$\hat{W}_1 = \hat{S}_2 = 60^\circ$ $\hat{P} = 60^\circ$ $\therefore \hat{W}_1 = \hat{P} = 60^\circ$ SP $\parallel$ TW	[tan chord theorem / $\angle$ tussen en koord] [$\angle$ s of equilateral Δ / $\angle$ e van gelyksydige Δ] [alt $\angle$ s = / <i>verwisselende $\angle$e gelyk</i>]	✓ S / R ✓ S ✓ R	(3)

QUESTION/VRAAG 9

9.1	$\frac{TQ}{QP} = \frac{VS}{SP}$ [Prop Th , TV $\parallel$ QS / Lyn $\parallel$ een sy van Δ] $\frac{VS}{SP} = \frac{WR}{RP}$ [Prop Th , RS $\parallel$ VW / Lyn $\parallel$ een sy van Δ] $\therefore \frac{TQ}{QP} = \frac{WR}{RP}$	✓S ✓R ✓ S/R (3)
9.2	$\hat{Q}_1 = \hat{R}_1$ [$\angle$s in the same segment / $\angle$e in dieselfde sirkel segment] $\hat{R}_1 = \hat{W}$ [corres $\angle$s, RS $\parallel$ VW / ooreenkomstige $\angle$e, RS $\parallel$ VW] $\therefore \hat{Q}_1 = \hat{W}$ $\hat{Q}_1 = \hat{T}$ [corres $\angle$s ,TV $\parallel$ QS / ooreenkomstige $\angle$e, TV $\parallel$ QS] $\therefore \hat{T} = \hat{W}$ $\therefore$ TPVW is a cyclic quad [converse $\angle$s in the same segment / lyn onderspan gelyke hoeke]	✓S ✓R ✓S/R ✓S ✓R (5)
		[8]

QUESTION/VRAAG 10

10.1.1	$\hat{D}_1 = x$ [tan chord theorem / <i>∠ tussen en raaklyn koord</i>] $\hat{C}_2 = \hat{D}_1 = x$ [Tans from common pt / <i>Rklyne vanuit dies punt</i>] $\hat{E}_1 = 180^\circ - 2x$ [sum of int $\angle$ s Δ ; $\angle$ e Δ] OR $\hat{D}_1 = x$ [tan chord theorem / <i>raaklyn koordst.</i>] $\hat{C}_2 = x$ [tan chord theorem / <i>raaklyn koordst.</i>] $\hat{E}_1 = 180^\circ - 2x$ [sum of int $\angle$ s Δ ; $\angle$ e Δ]	$\checkmark$ S $\checkmark$ R $\checkmark$ S $\checkmark$ R $\checkmark$ R (5)
10.1.2	In ΔECD and ΔCBD $\hat{C}_2 = \hat{B} = x$ [tan chord theorem / <i>raaklyn koordst.</i>] $\hat{D}_2 = \hat{B} = x$ [$\angle$ s opp equal sides / <i>∠ teenoor gelyke sye</i>] $\therefore \hat{D}_1 = \hat{D}_2 = x$ $\therefore \Delta ECD \parallel \Delta CBD$ [$\angle$, $\angle$, $\angle$] OR In ΔECD and ΔCBD $\hat{C}_2 = \hat{B} = x$ [tan chord theorem / <i>raaklyn koordst.</i>] $\hat{D}_2 = \hat{B} = x$ [$\angle$ s opp equal sides / <i>∠ teenoor gelyke sye</i>] $\therefore \hat{D}_1 = \hat{D}_2 = x$ $\hat{E}_1 = \hat{C}_3$ [3^{rd} $\angle$ of Δ / $\angle$ e Δ] $\therefore \Delta ECD \parallel \Delta CBD$	$\checkmark$ S / R $\checkmark$ S $\checkmark$ R (3) $\checkmark$ S / R $\checkmark$ S $\checkmark$ S (3)

10.2.1	$\frac{EC}{BC} = \frac{CD}{BD} = \frac{ED}{CD} \quad [\Delta ECD \parallel \Delta CBD]$ $\frac{CD}{BD} = \frac{ED}{CD}$ $CD^2 = ED \cdot BD$ $ED = CE$ $\therefore CD^2 = CE \cdot BD$	✓ S ✓ $CD^2 = ED \cdot BD$ ✓ $ED = CE$ (3)
10.2.2	$\hat{C}_2 = \hat{D}_2 = x \quad [\text{proven / reeds bewys}]$ $BD \parallel CE \quad [\text{alt } \angle s = / \text{verwisselende } \angle \text{ gelyk}]$ $\therefore \frac{FE}{DE} = \frac{FC}{CB} \quad [\text{line } \parallel \text{ one side of } \Delta / \text{lyn } \parallel \text{ een sy van } \Delta]$ $\therefore \frac{CF^2}{EF^2} = \frac{CB^2}{DE^2}$ $\therefore \frac{CF^2}{EF^2} = \frac{DE \cdot BD}{DE^2} \quad [CB = CD]$ $\therefore \frac{CF^2}{EF^2} = \frac{BD}{DE}$	✓ S ✓ R ✓ S ✓ R ✓ squaring ✓ subst $CD^2 = ED \cdot BD$ (6)
		[17]

TOTAL/TOTAAL: 150