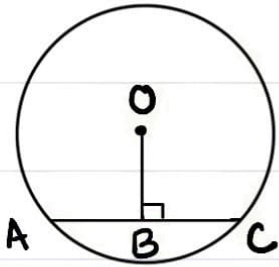


Euklidiese Meetkunde : Deel 1

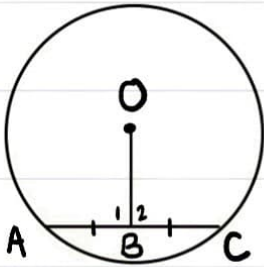
STELLINGS:

Middelpunt / Middellyn / radius



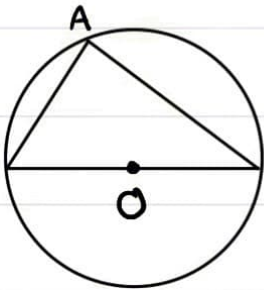
$$AB = BC$$

(loodlyn uit midpunt $\odot$ na koord)



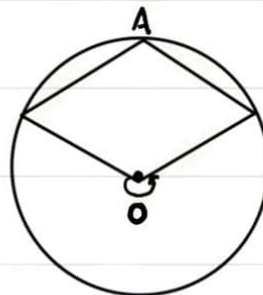
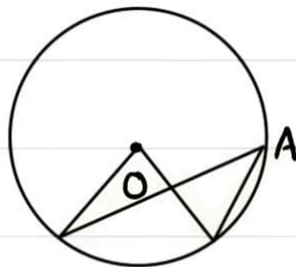
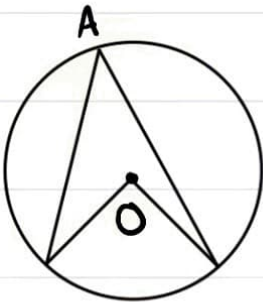
$$\hat{B}_1 = \hat{B}_2 = 90^\circ$$

(Lyn uit midpunt $\odot$ na midpunt v. koord)



$$\hat{A} = 90^\circ$$

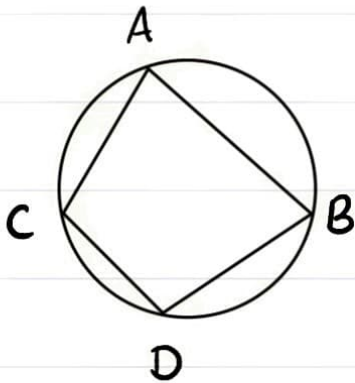
($\angle$ in halwe $\odot$)



$$\hat{O} = 2\hat{A}$$

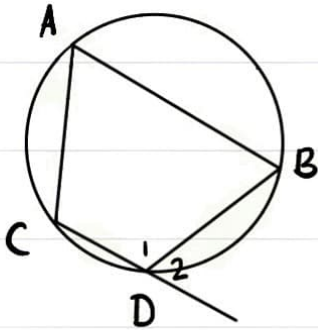
(Midpunts $\angle = 2 \times$ Omtreks $\angle$)

Koordevierhoek / Konsiklus / KYK vir 4 punte op omtrek



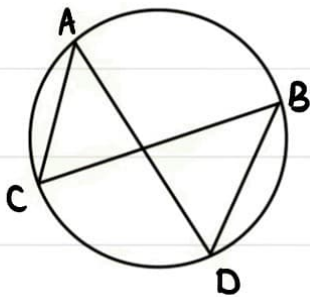
$$\hat{A} + \hat{D} = 180^\circ \text{ en } \hat{C} + \hat{B} = 180^\circ$$

(teenoorst $\angle$ e v kvhk = 180°)



$$\hat{D}_2 = \hat{A}$$

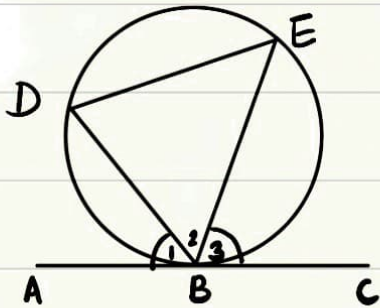
(Buite $\angle$ v. kvhk)



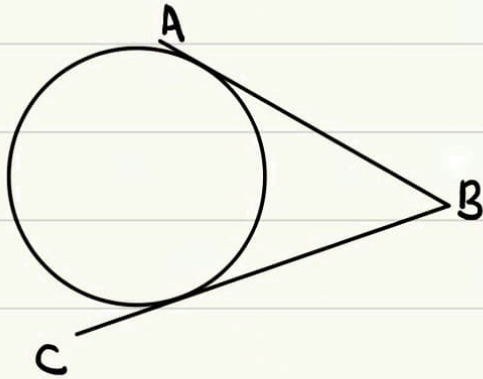
$$\hat{A} = \hat{B} \text{ en } \hat{C} = \hat{D}$$

($\angle^e$ in dies. $\odot$ segm)

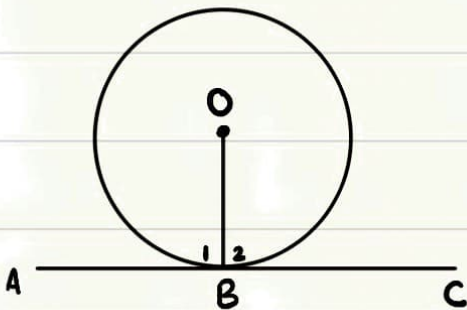
Raaklyne / Raak



$\hat{B}_1 = \hat{E}$ en $\hat{B}_2 = \hat{D}$
($\angle$ tussen raaklyn en koord)

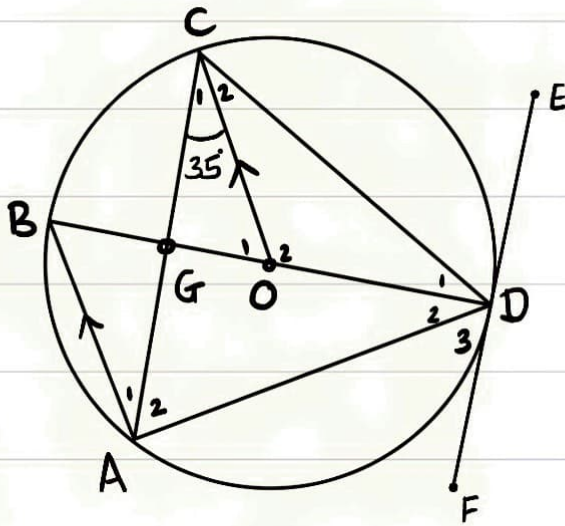


$AB = CB$
(raaklyne vanuit dies. punt)



$\hat{B}_1 = \hat{B}_2 = 90^\circ$
(raaklyn $\perp$ radius)

① In die onderstaande skets is O die middelpunt van die sirkel. EF is 'n raaklyn aan sirkel by D .



Bepaal met redes, die groottes van:

a) $\hat{A}_1$

b) $\hat{A}_2$

c) $\hat{O}_2$

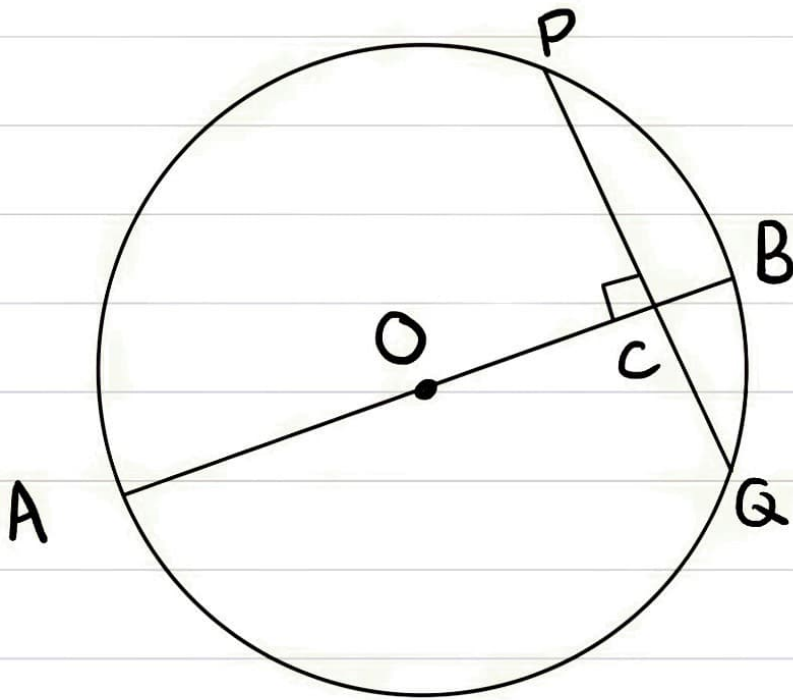
d) $\hat{C}_2$

e) $\hat{B}$

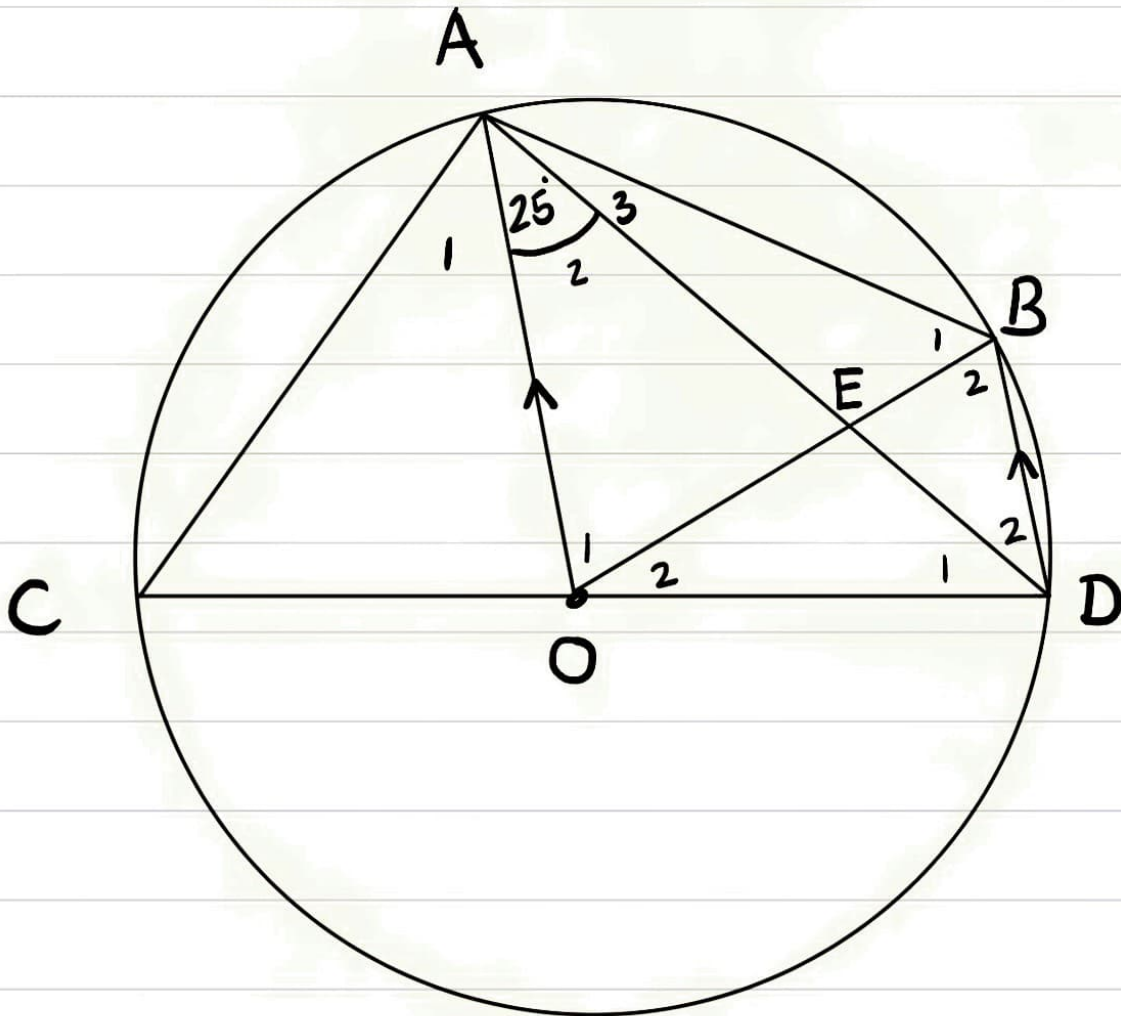
f) $\hat{D}_3$

② O is die middelpunt in die onderstaande skets. AB sny koord PQ loodreg.

$AB = 10 \text{ cm}$, $PQ = 8 \text{ cm}$ en $CB = x \text{ cm}$. Bereken x .



③ O is die middelpunt en $AO \parallel BD$. $\angle AOE = 25^\circ$

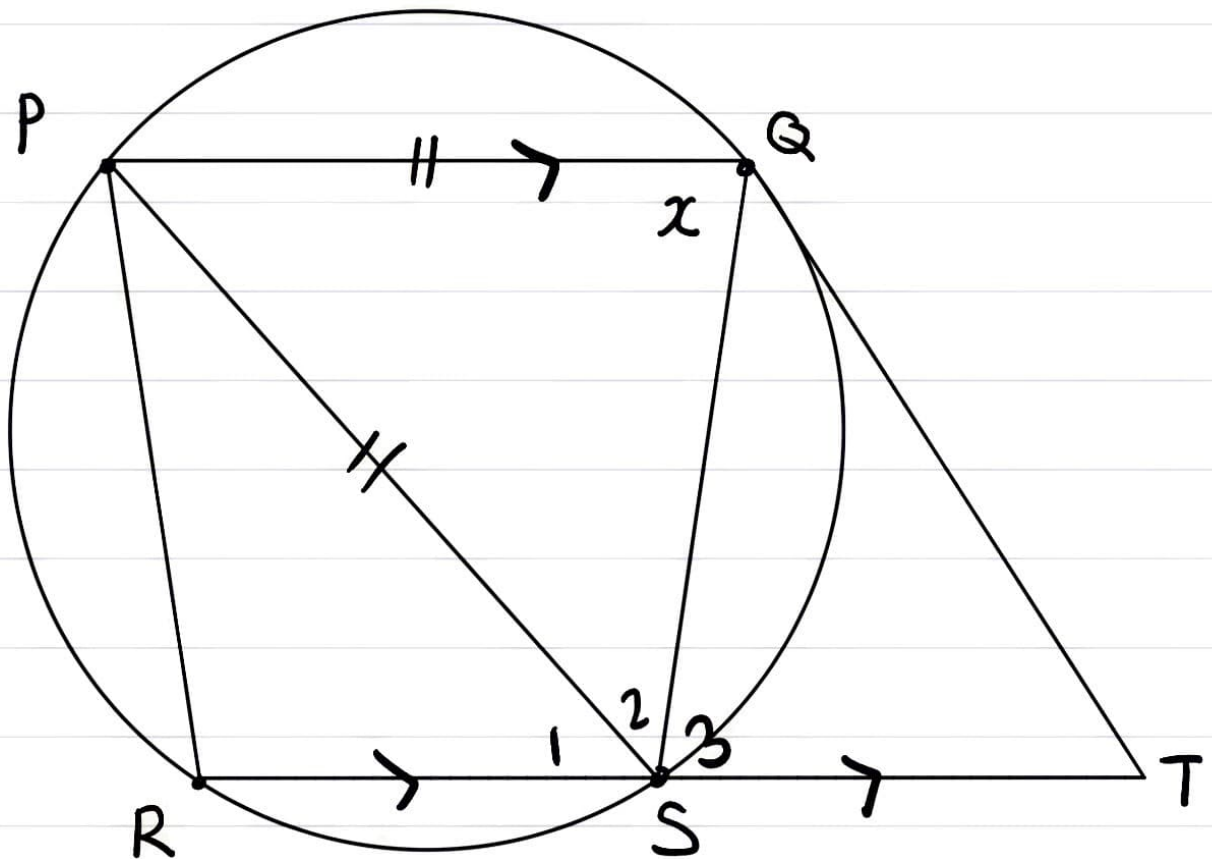


Bepaal die grootte van:

a) $\angle O_1$

b) $\angle C$

- ④ In die onderstaande skets is $PQ = PS$.
 QT is 'n raaklyn aan sirkel by Q en RST is 'n reguitlyn ewewydig aan PQ .

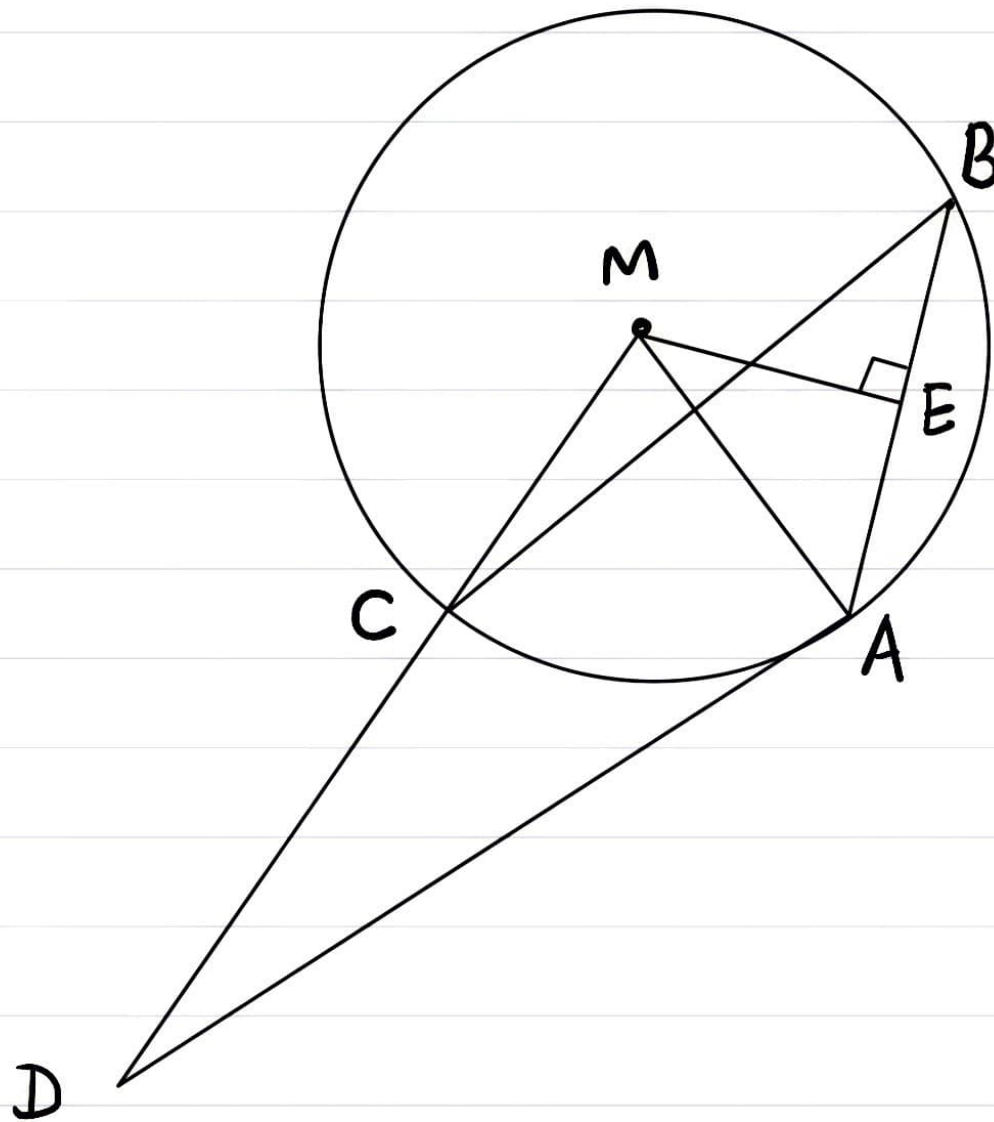


- a) As $\hat{PQS} = x$, skryf nog 3 ander hoeke neer wat gelyk is aan x .

b) Bereken $\hat{SQT}$ i.t.v x .

c) Bewys dat PQTR 'n parallelogram is.

- ⑤ M is die middelpunt van die sirkel deur punte A, B en C. ME is loodreg op AB. $AB = CD = 8\text{cm}$, $AD = 12\text{cm}$ en $ME = 3\text{cm}$.



Bewys dat
AD 'n raaklyn
is aan die
sirkel.