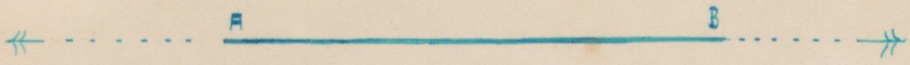
Tööde vihk.

Rudolf Seppa.
T. Õ. S.

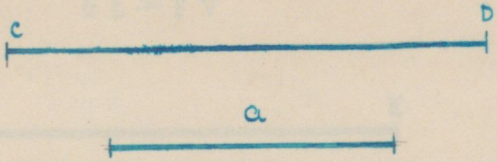
Tartu Õpetajate Seminar

Sirgjoon.

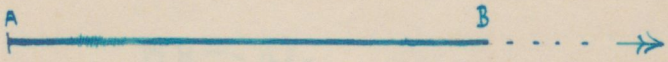
13. IX. 26.



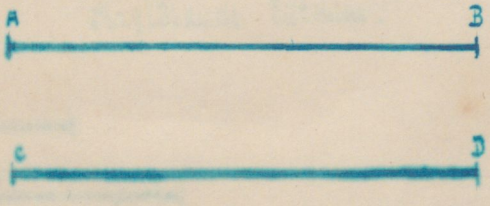
Sirglõigud.



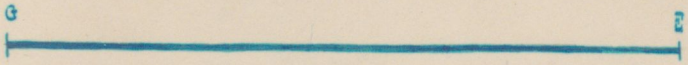
Kiir.

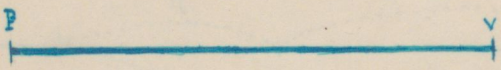


Sirglõikude võrdlemine.

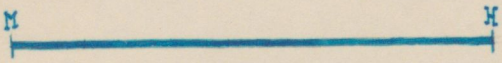


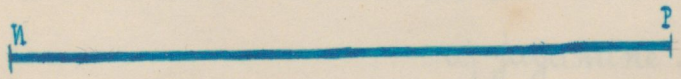
AB = CD.





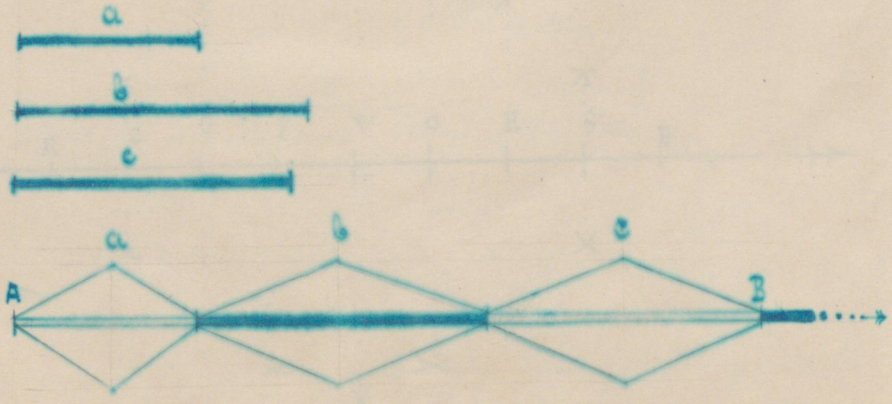
GE > FV



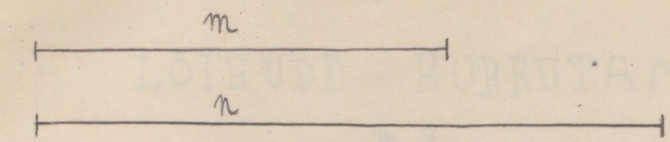


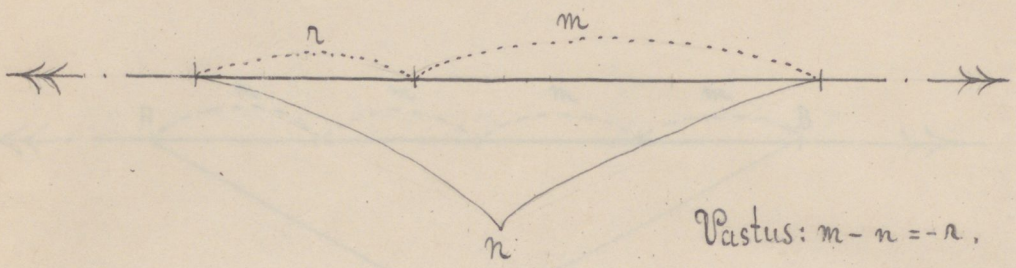
МН < ИР.

Sirgjõuade liitmine.



15. IX. 26.

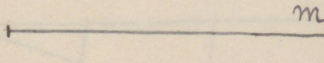


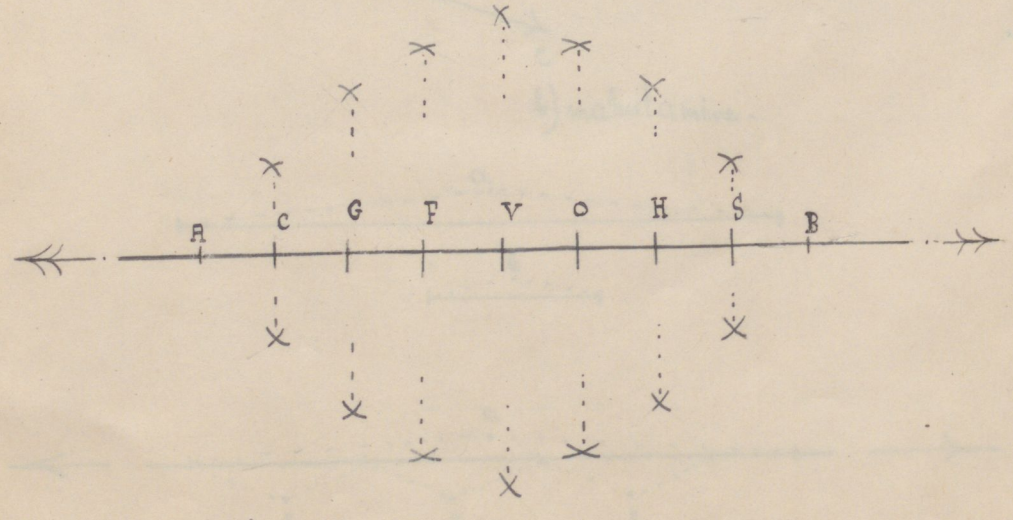


Vastus: $m - n = -n$.

LÕIKUDE JAGAMINE.

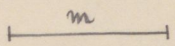
a) jagamine.

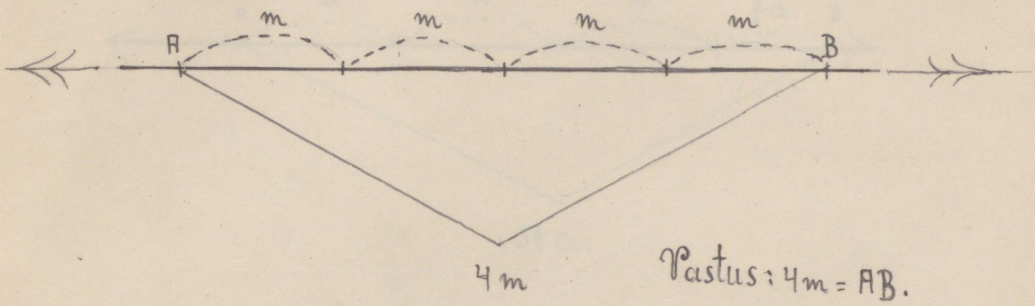




LÕIKUDE KORRUTAMINE.

m. 4.

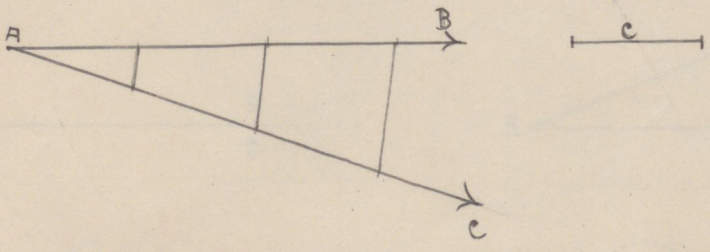




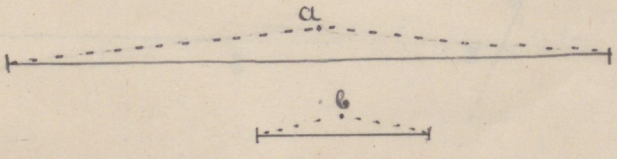
Vastus: 4m = AB.

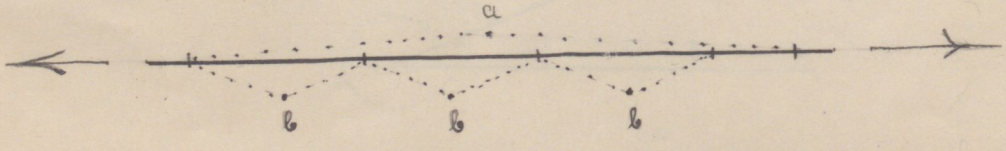
(LÕIKUDE JAGAMINE).

AB : 3.



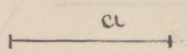
b) mahutamine.

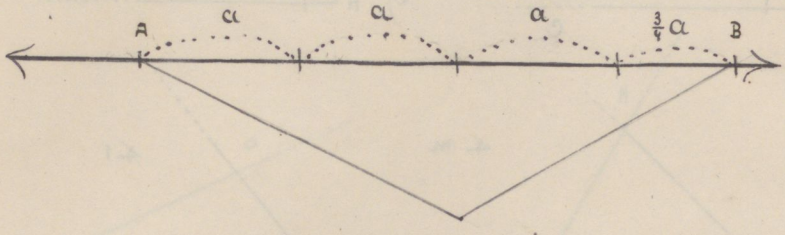




Vastus: a : b = $3\frac{1}{3}$.

$3\frac{3}{4} \cdot a$.

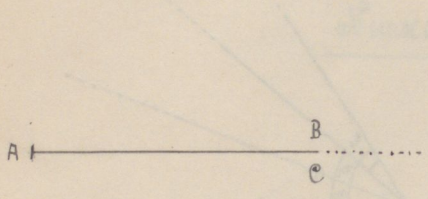


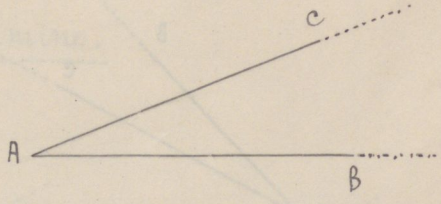


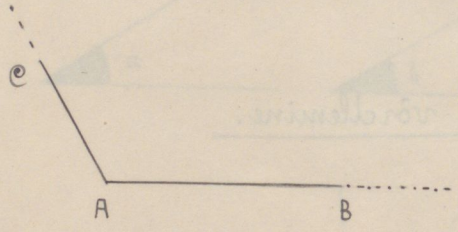
$3\frac{3}{4}\,a$.

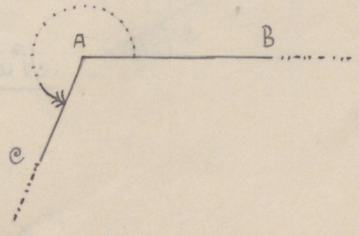
Nurga tekkimine.

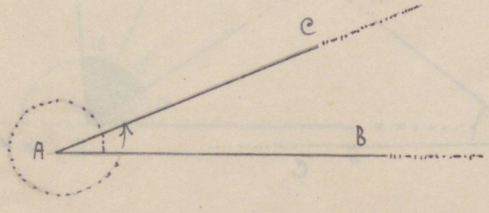
20-IX-26.



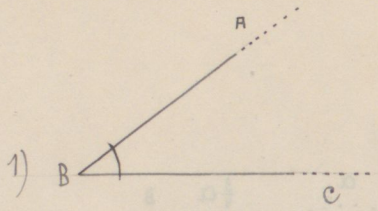




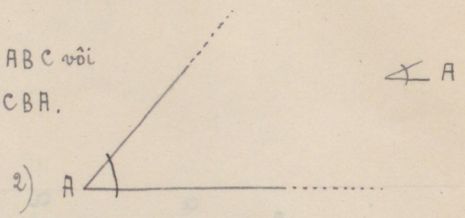




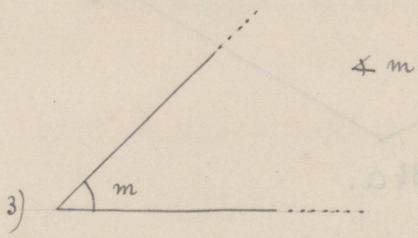
Nurga tähistamine.



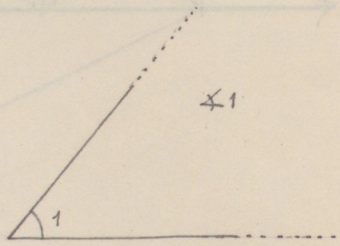
∠ ABC või
∠ CBA.



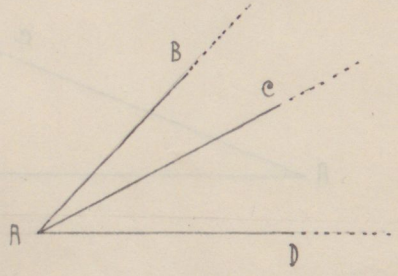
∠ A

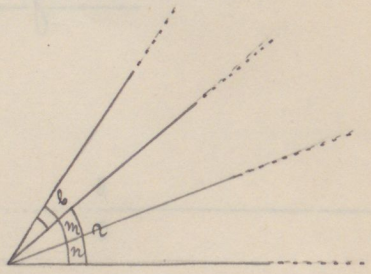


∠ m

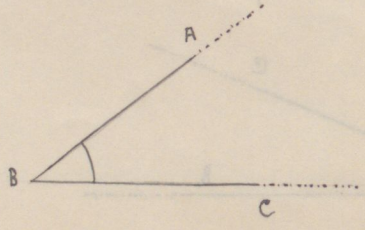


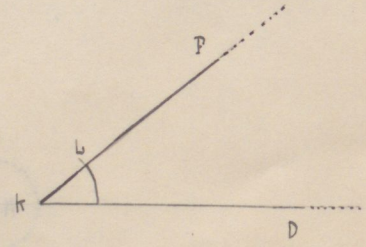
∠ 1



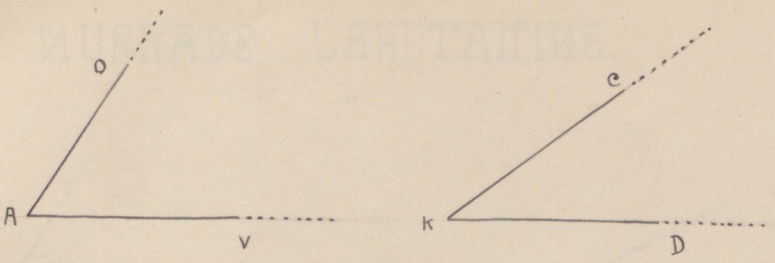


Nurkade võrdlemine.

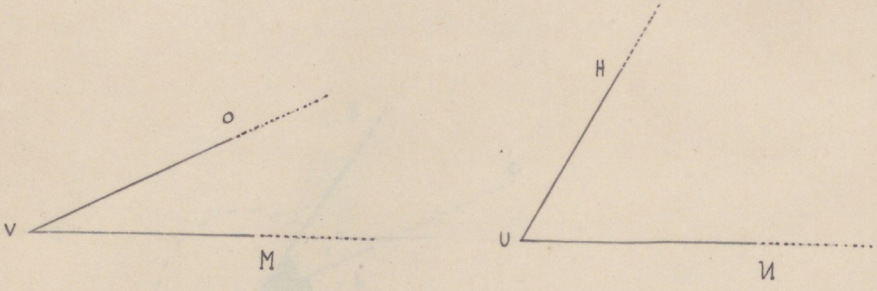




∠ ABC. = ∠ PKD.



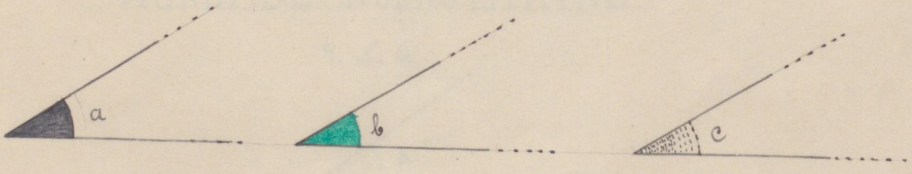
∠ OAV > ∠ CKD.

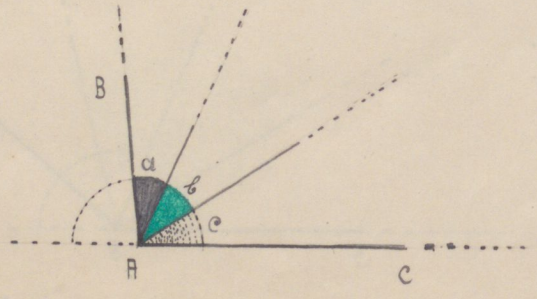


∠ OVM < ∠ HUИ.

Nurkade liitmine.

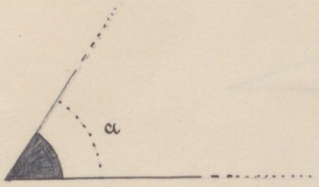
21.IX.26.

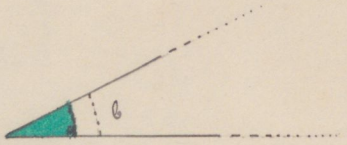


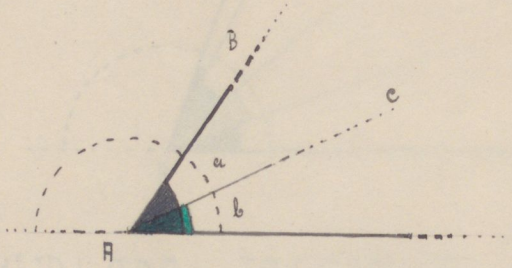


Vastus: ∠ a + ∠ b + ∠ c = ∠ BAC.

NURKADE LAHUTAMINE.



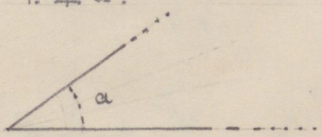


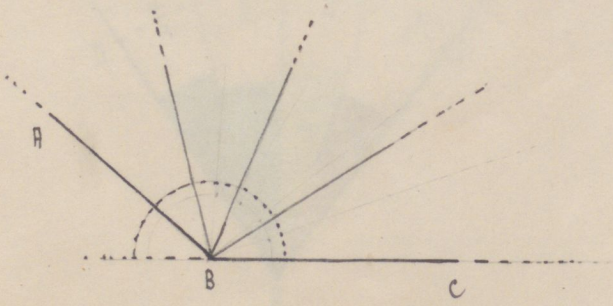


Vastus: ∠ a − ∠ b = ∠ BAC.

NURKADE KORRUTAMINE.

4. ∠ a.

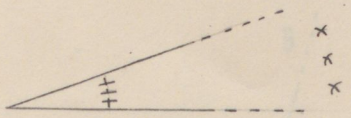


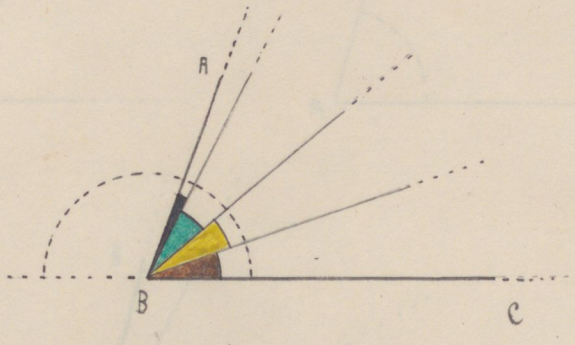


Vastus: 4. ∠ a = ∠ ABC.

$3\frac{3}{4} \cdot \sphericalangle a.$

22.IX.26.

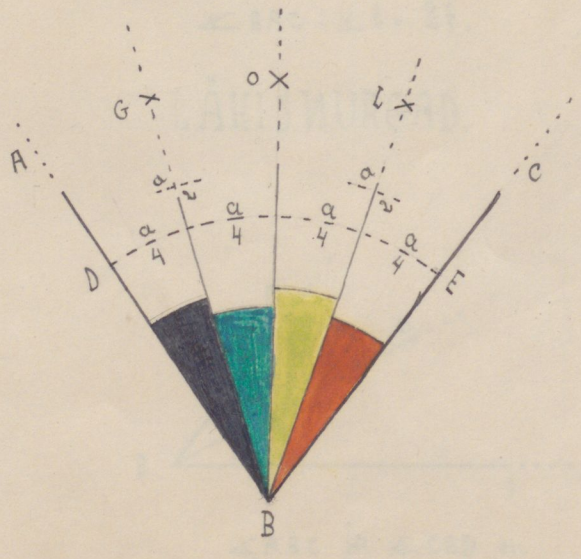




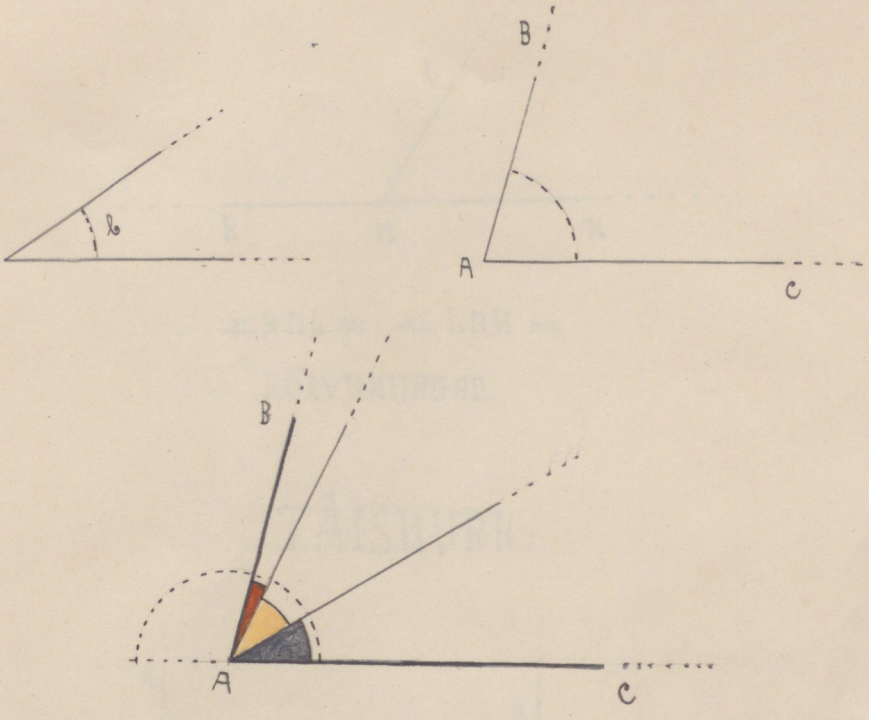
NURKADE JAGAMINE.

A) JAGAMINE.

$\sphericalangle ABC : 4.$

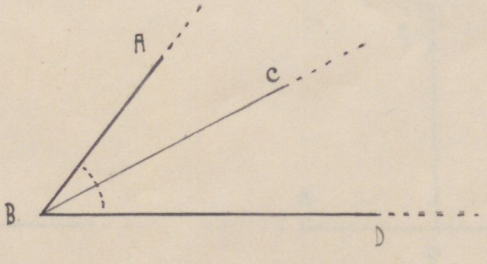


B) MAHUTAMINE.



∠BAC : ∠b = 2 1/3.

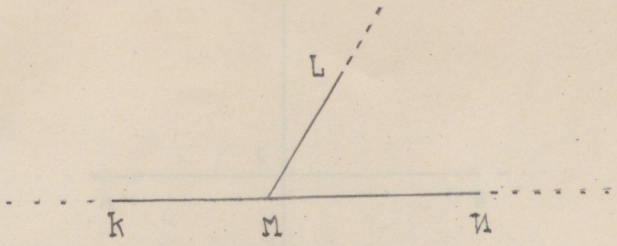
LÄHISNURGAD.



∠ABC ja ∠CBD on

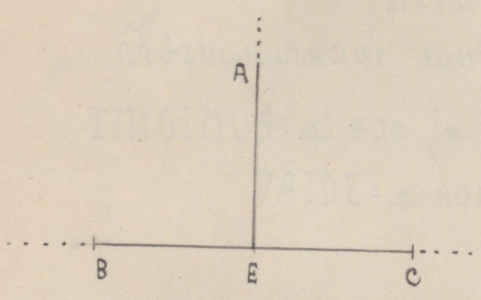
LÄHISNURGAD.

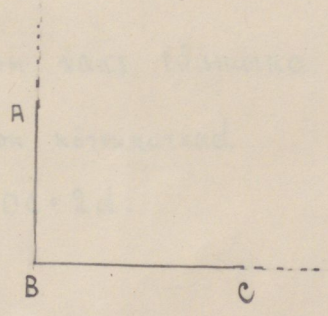
KÕRVUNURGAD.

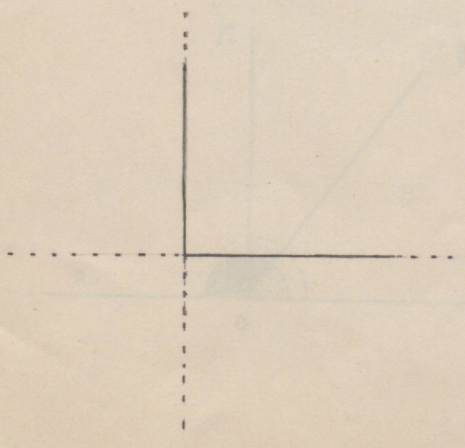


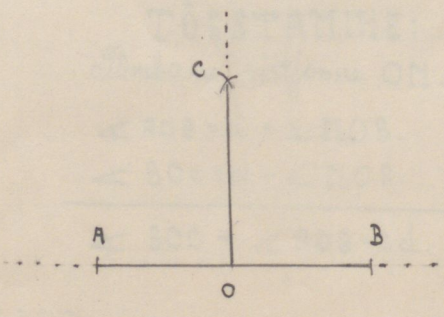
∠KML ja ∠LMN on
KÕRVUNURGAD.

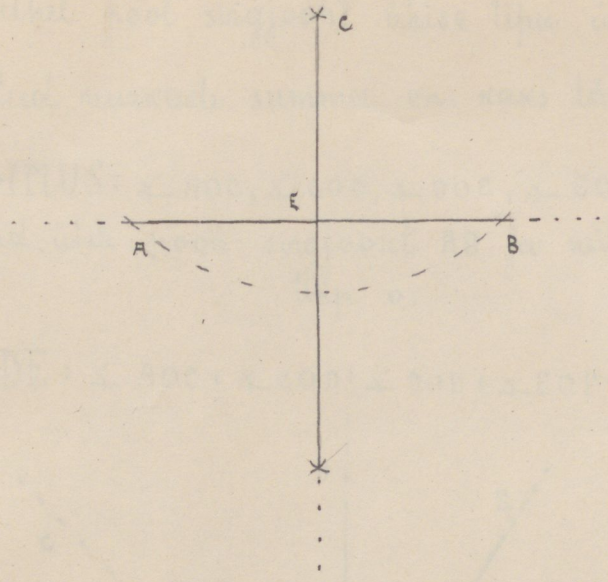
TÄISNURK.









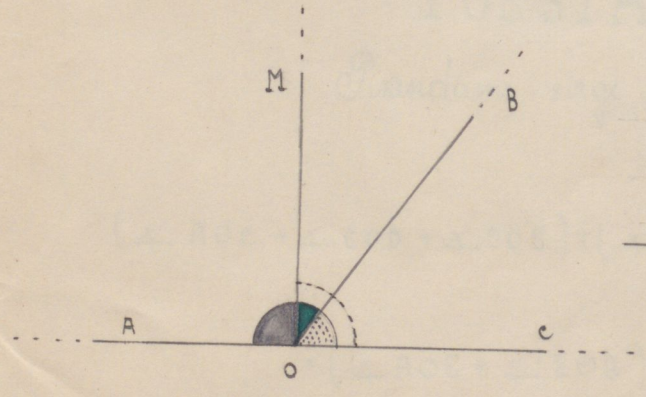


LAUSE:

Kõrvunurkade summa on kaks täisnurka.

TINGIMUS: ∠ AOC ja ∠ BOC on kõrvunurkad

VÄIDE: ∠ AOC + ∠ BOC = 2d.



TÕESTAMINE:

Tõmbame ristjoone OM.

∠ AOB = d + ∠ MOB.

∠ BOC = d − ∠ MOB.

∠ BOC + ∠ AOB = 2d.

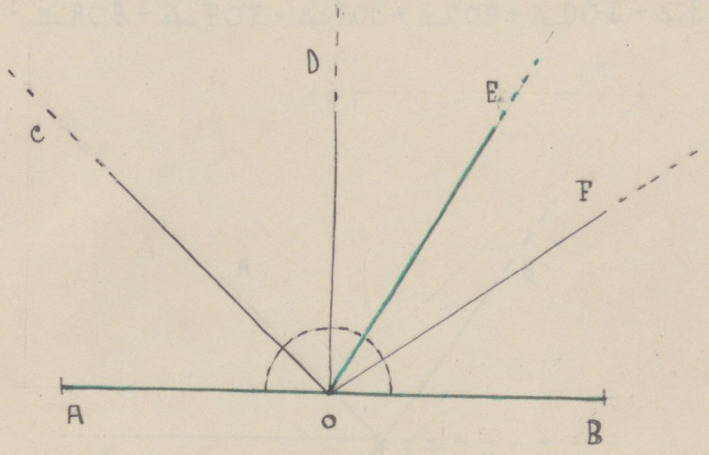
I JÄRELDUS.

27-IX-26.

Ühel pool sirgjoont ühise tipu ümber asetatud nurkade summa on kaks täisnurka.

TINGIMUS: $\measuredangle AOC, \measuredangle COD, \measuredangle DOE, \measuredangle EOF, \measuredangle FOB$ on asetatud ühele poole sirgjoont AB ja neil on ühine tipp O.

VÄIDE: $\measuredangle AOC + \measuredangle COD + \measuredangle DOE + \measuredangle EOF + \measuredangle FOB = 2d.$



TÕESTAMINE.

Pikendame sirge OE, saame:

$$(\measuredangle AOC + \measuredangle COD + \measuredangle DOE) + (\measuredangle EOF + \measuredangle FOB) =$$

$$= (\measuredangle AOE + \measuredangle EOB) = 2d.$$

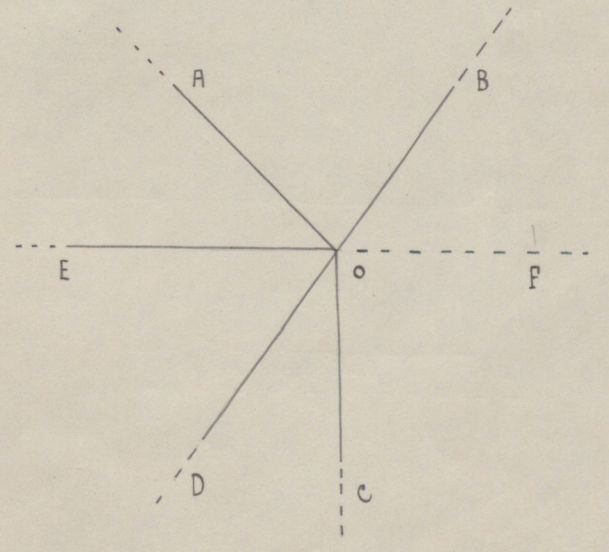
II. JÄRELDUS.

LAUSE:

Ühise tipu ümber asetatud nurkade summa on neli täisnurka.

TINGIMUS: $\angle AOB, \angle BOF, \angle FOC, \angle COD, \angle DOE, \angle EOA$ on asetatud ühise tipu ümber.

VÄIDE: $\angle AOB + \angle BOF + \angle FOC + \angle COD + \angle DOE + \angle EOA = 4d$.



TÕESTAMINE:

Pikendame juhuslikku külje, näit EO, saame: 8. KI -24.

$(\angle EOA + \angle AOB + \angle BOF) + (\angle FOC + \angle COD + \angle DOB) =$
$2d + 2d = 4d$.