

$$SA^2 = SH \cdot SD = SC \cdot SD = \boxed{SM \cdot SL = SJ \cdot SI} \quad (\text{H là I tiếp}) \Rightarrow \boxed{JMLI \text{ tiếp}}$$

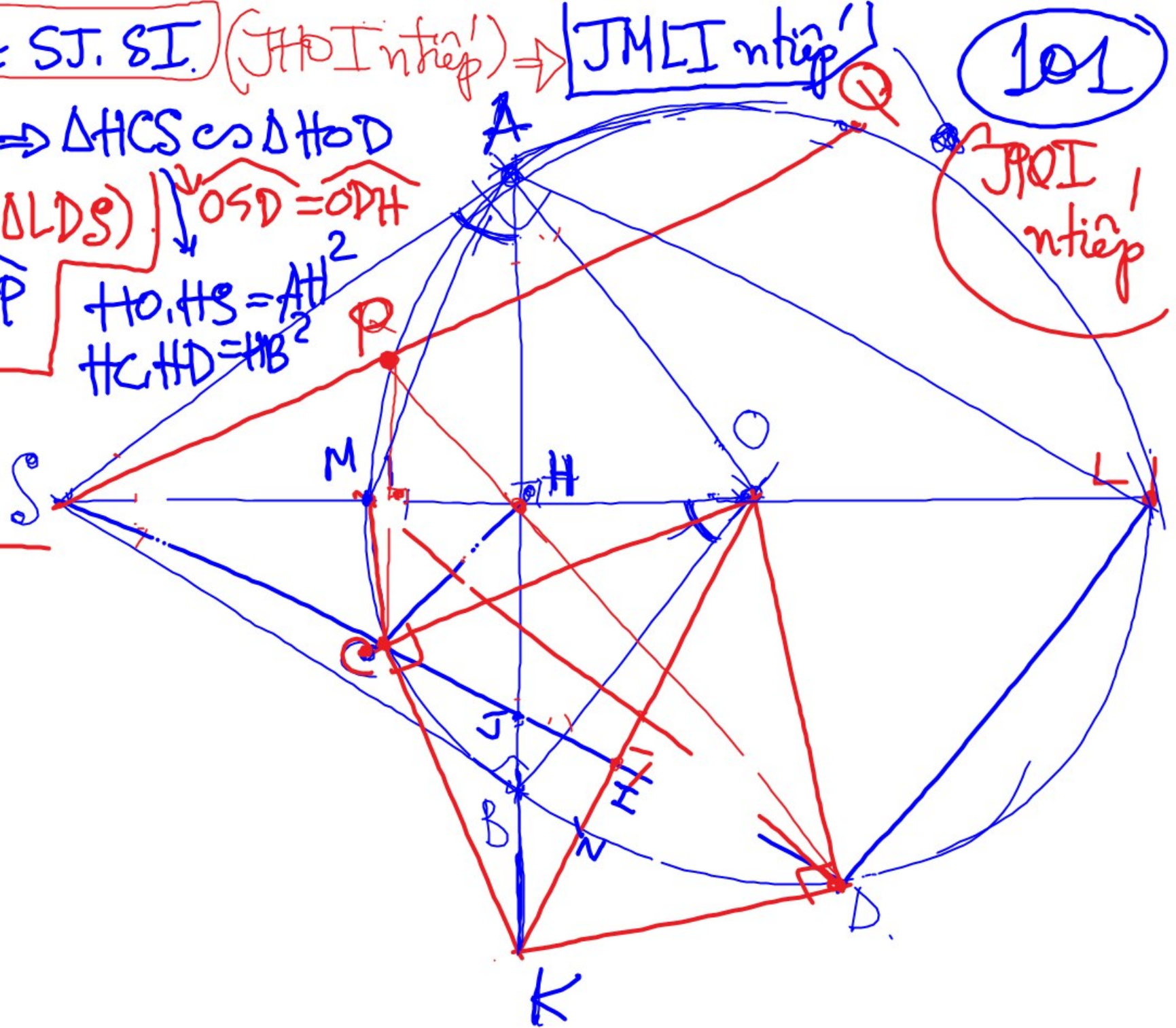
CHD tiếp: HB góc CHD $\Rightarrow \Delta HCS \sim \Delta HOD$

CM góc SCH ($\Delta CMS \sim \Delta LDS$) $\downarrow OS = OD$

MD góc CDH \Rightarrow SO góc CSP $\left\{ \begin{array}{l} HO \cdot HS = AH^2 \\ HC \cdot HD = HB^2 \end{array} \right.$

AM góc SAH \Rightarrow M là tâm
đ tròn nội tiếp ΔSAB .

IS góc AIB ($\angle IBA = \angle IAB$)



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JQI tiếp

$$SA^2 = SH \cdot SO = SC \cdot SD = \boxed{SM \cdot SL = ST \cdot SI} \quad (\text{H\&I tiếp}) \Rightarrow \boxed{\text{JMLI tiếp}} \quad \textcircled{101}$$

CHD tiếp: HB pgiac CHD $\Rightarrow \Delta HCS \sim \Delta HOD$

CM pgiac SCH ($\Delta CMS \sim \Delta LDS$) $\downarrow \widehat{OSD} = \widehat{ODH}$

MD pgiac CDH \Rightarrow SO pgiac CSP $\left\{ \begin{array}{l} HO \cdot HS = AH^2 \\ HC \cdot HD = HB^2 \end{array} \right.$

AM pgiac SAH \Rightarrow M là tâm đ tròn nội tiếp ΔSAB .

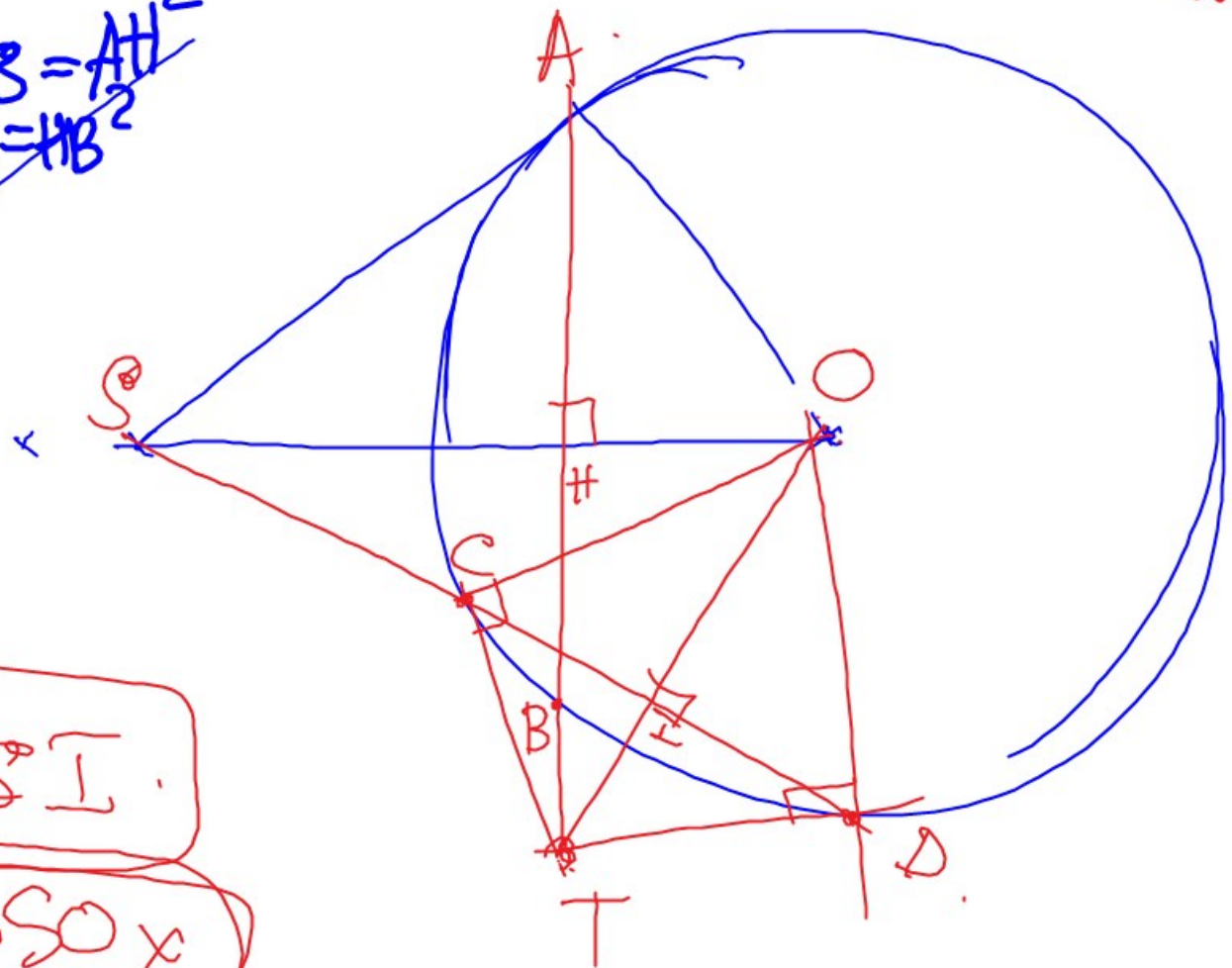
IS pgiac AIB ($\widehat{SIB} = \widehat{SBA}$)

Ký năng

$$SA^2 = ST \cdot SI$$

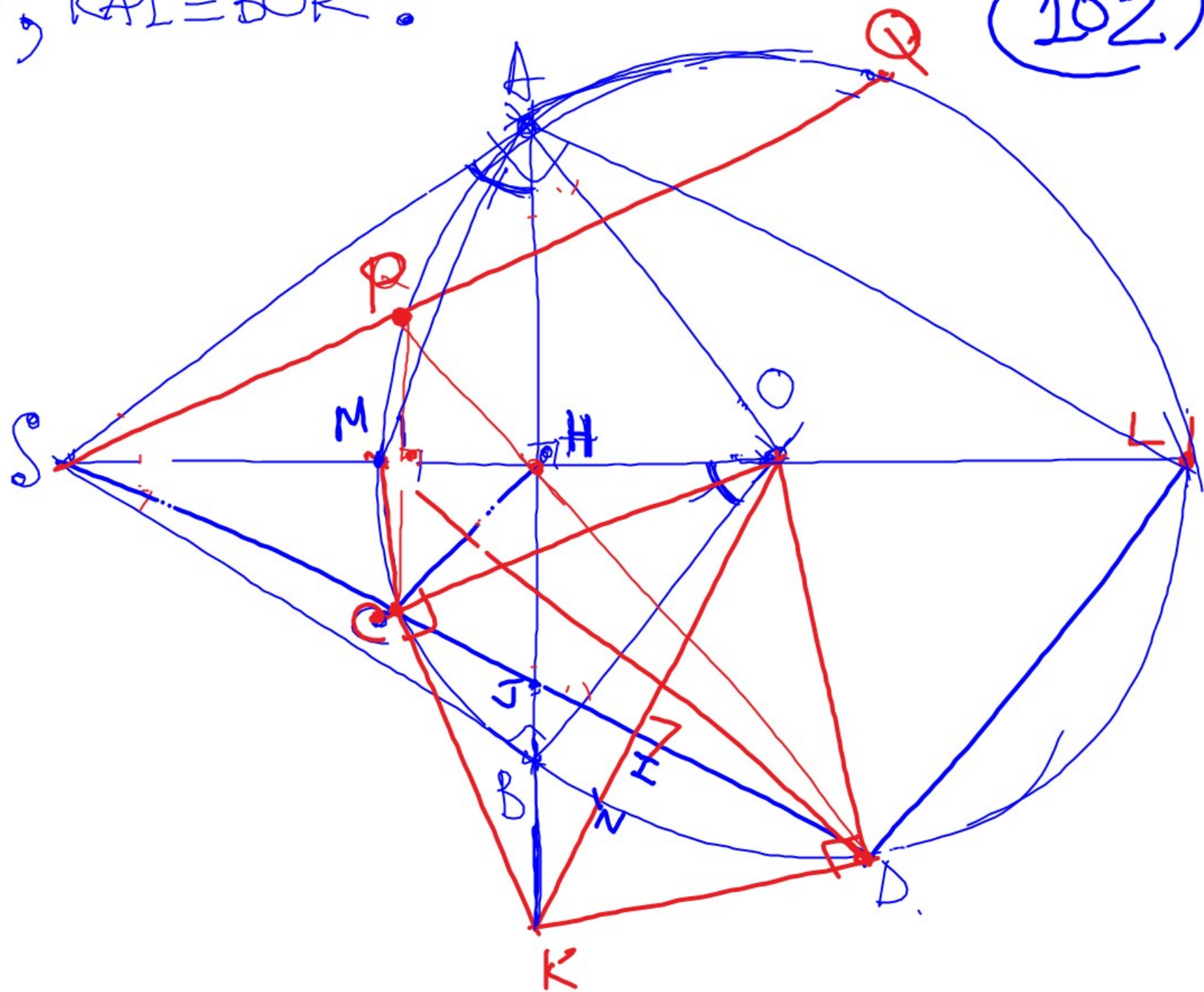
$$\Rightarrow SM \cdot SL = SH \cdot SO$$

$$\boxed{SM \cdot SL = ST \cdot SI}$$



\widehat{SAOIB} tiếp $\Rightarrow \widehat{SAB} = \widehat{SIA}$; $\widehat{KAI} = \widehat{BOK}$.
 \widehat{KHOI} tiếp
 \widehat{SHIK} tiếp

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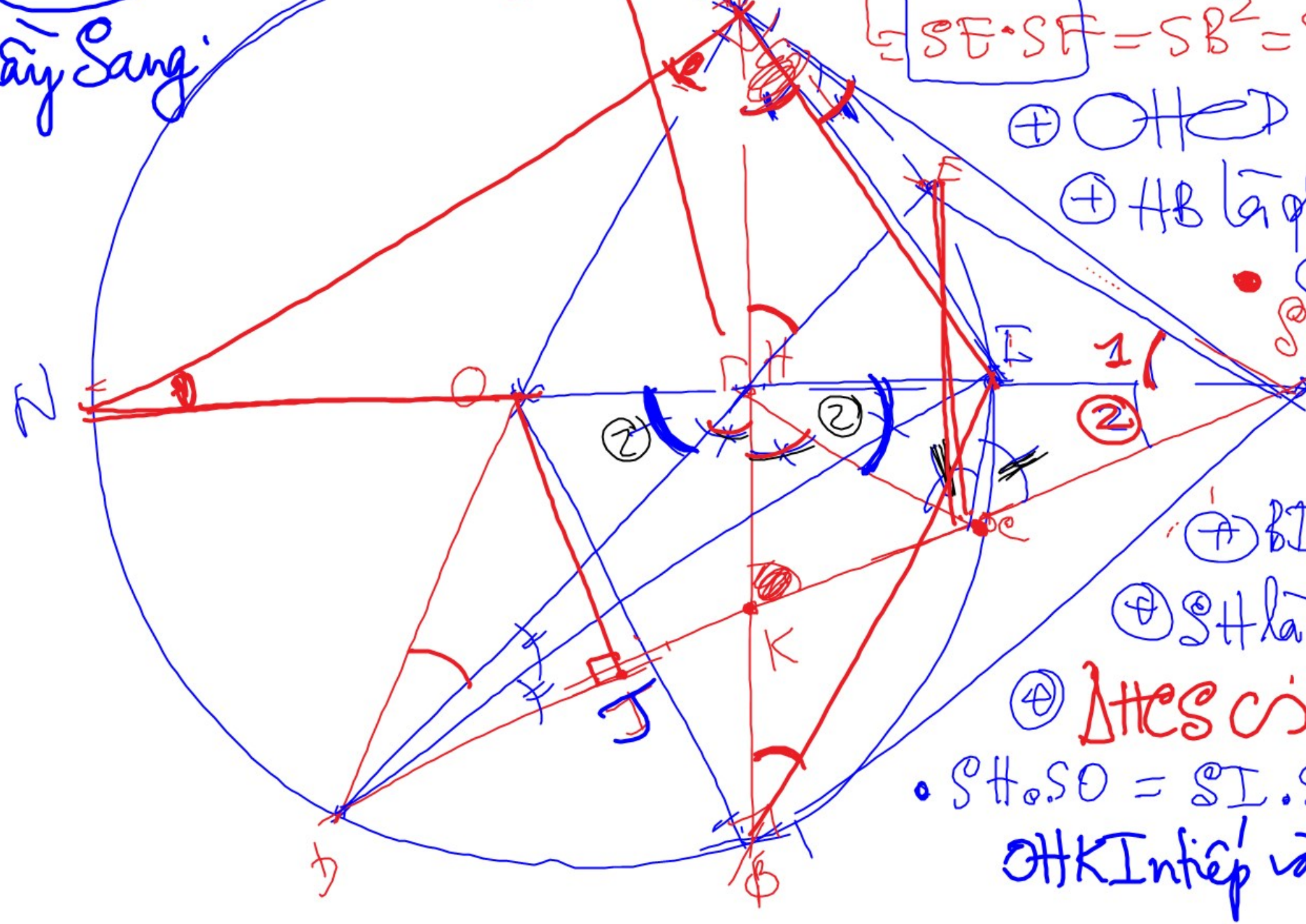


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Thầy Sang

Gm. Vuông tại trung tâm A điểm

$$\left\{ \begin{array}{l} SE \cdot SD = SA^2 = SO^2 - R^2(A^2) \text{ Thẳng} \\ SE \cdot SF = SB^2 = SO^2 - OB^2(R^2) \text{ Trục} \end{array} \right.$$



- ⊕ $\odot H \odot D$ nội tiếp
- ⊕ HB là phân giác DHE
- ⊕ CI là phân giác SCH
- ⊕ DI là phân giác CDE
- ⊕ AI — SAH.
- ⊕ BI là phân giác SBH.
- ⊕ SH là phân giác SE
- ⊕ $\triangle HCS \cap \triangle HOB \Rightarrow OSD = ADI$
- $SH \cdot SO = SI \cdot SN = SK \cdot SJ$
- OHK nội tiếp và KJN nội tiếp

① $\triangle OBI$ nội tiếp đường tròn tâm S $\Rightarrow \widehat{ABO} = \widehat{ASO}$

② $\triangle OHK$ ~~đ~~ $\triangle KO$ $\Rightarrow \widehat{OCD} = \widehat{OKD}$

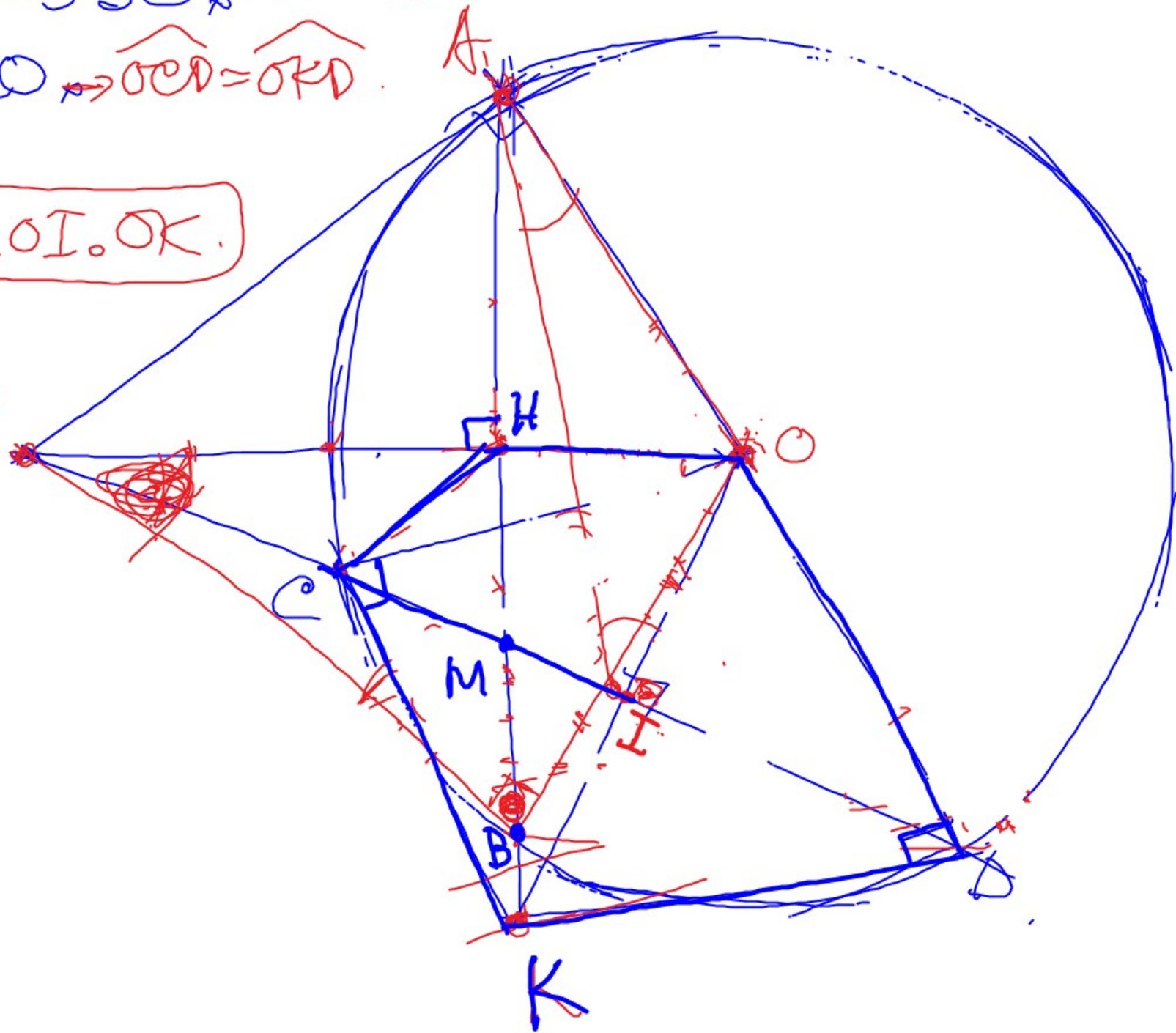
③ ABK thẳng hàng

④ $\triangle SHIK$ nội tiếp $\Rightarrow OH \cdot OS = OI \cdot OK$

$$OA^2 = OH \cdot OS = OI \cdot OK$$

$$OA^2 = SH \cdot SD = SC \cdot SD = SM \cdot SI$$

($\triangle HMI$ nội tiếp).



① SAOB nội tiếp đ tròn đ kính SO $\Rightarrow \widehat{BAI} = \widehat{BOK} \mid SA^2 = SI^2 - SC^2$

② OHOK

KO $\Rightarrow \widehat{OCD} = \widehat{OKD}$

③ ABK thẳng hàng. $SA^2 = SC \cdot SD = SH \cdot SO$

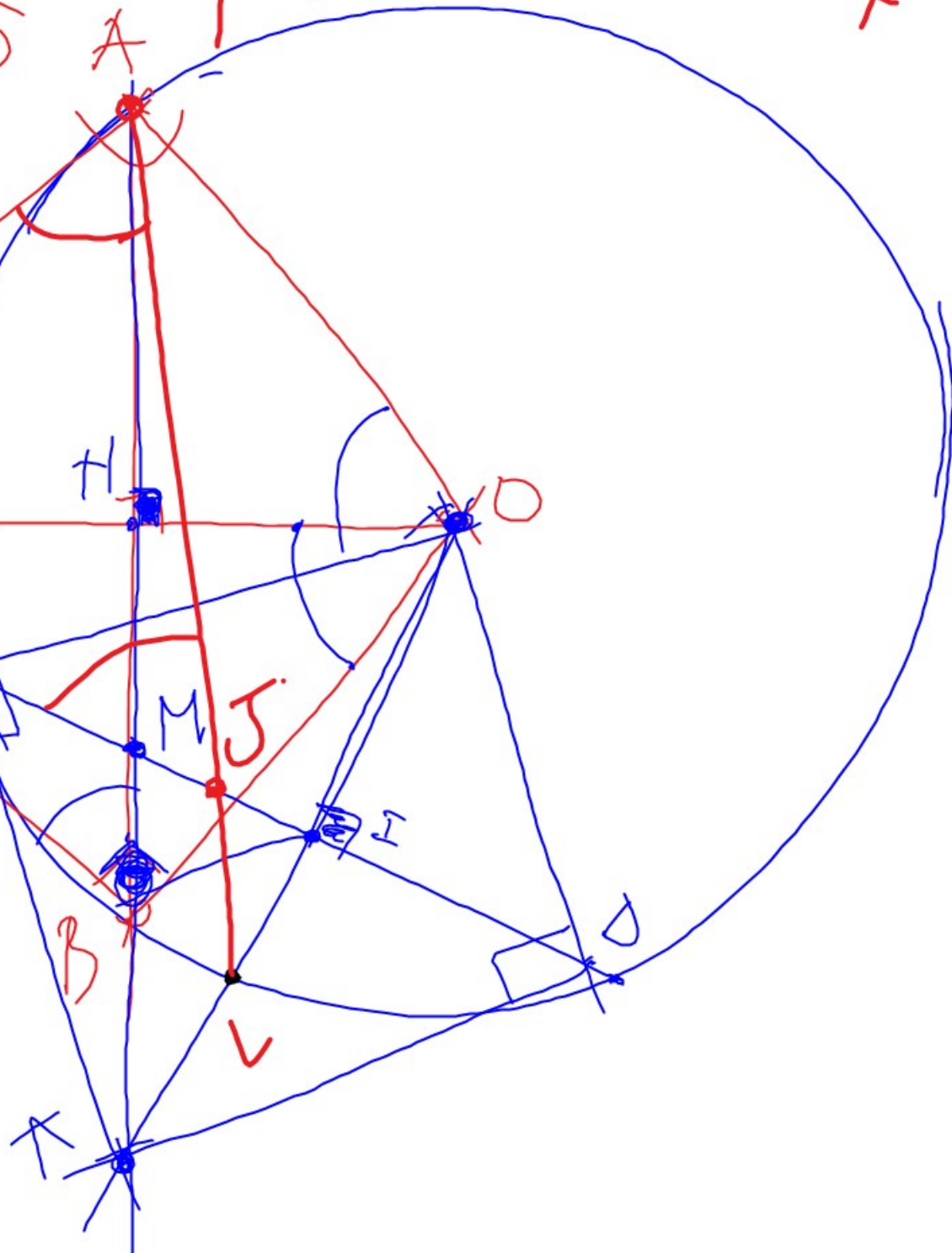
$$= SM \cdot SI$$

SO \perp AB
 \downarrow
 $\widehat{Q_1} = \widehat{Q_2} = \widehat{P_1}$

ΔSAT cân tại S

$$SA^2 = SI^2 - SC^2$$

$\Rightarrow \widehat{P_1} = \widehat{Q_1}$
 $\Rightarrow SA$ là tiếp tuyến



① SAOB I nội tiếp đ tròn đ kính SO $\Rightarrow \widehat{ABO} = \widehat{ASO}$

$$SA^2 = SI^2 - SC^2$$

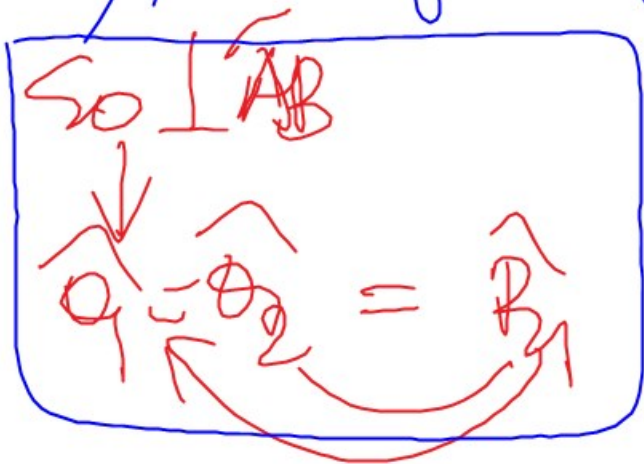
② OHOK

KO $\Rightarrow \widehat{OCD} = \widehat{OKD}$

③ AB, K hằng hằng

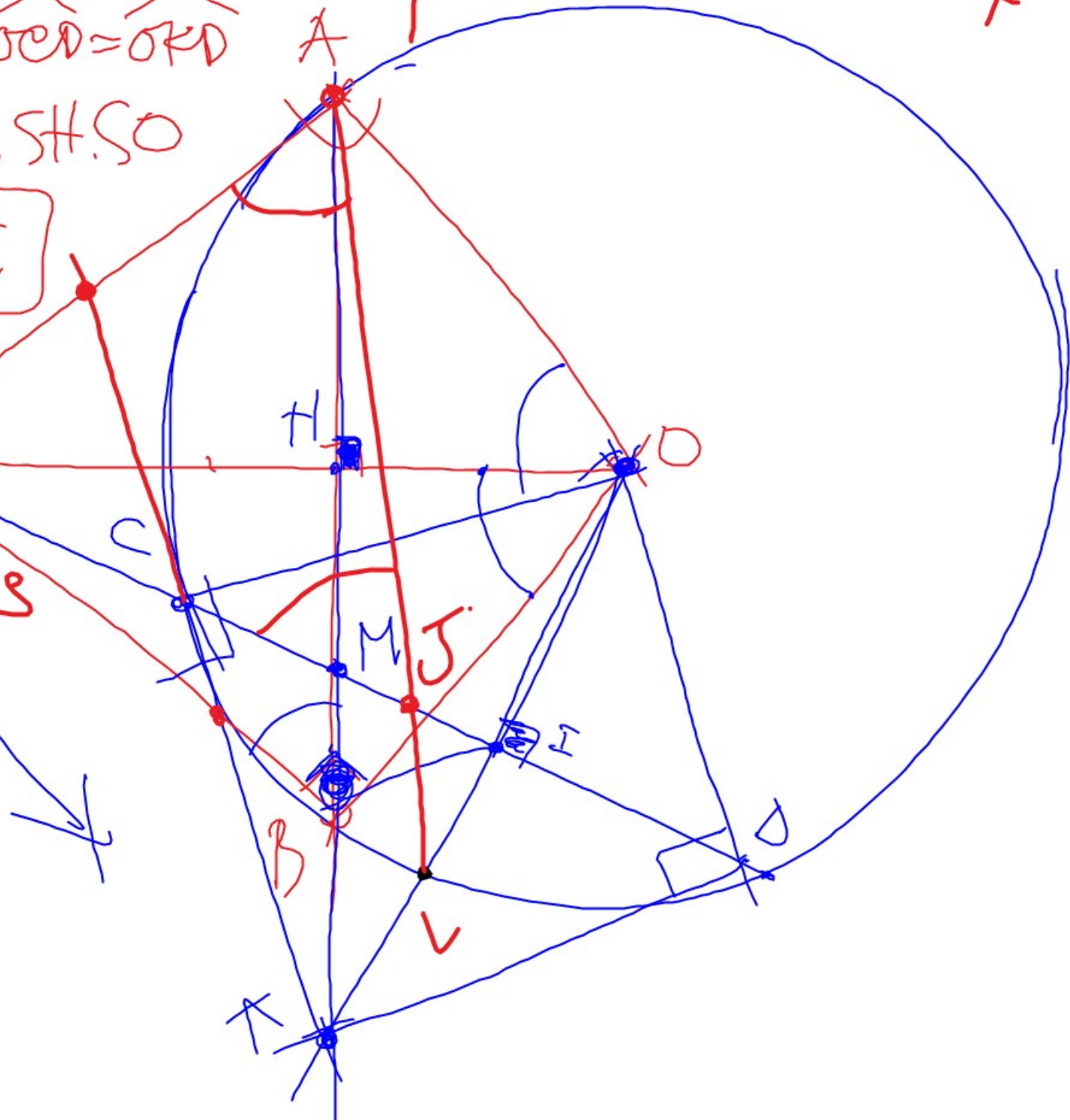
$$SA^2 = SC \cdot SD = SH \cdot SO$$

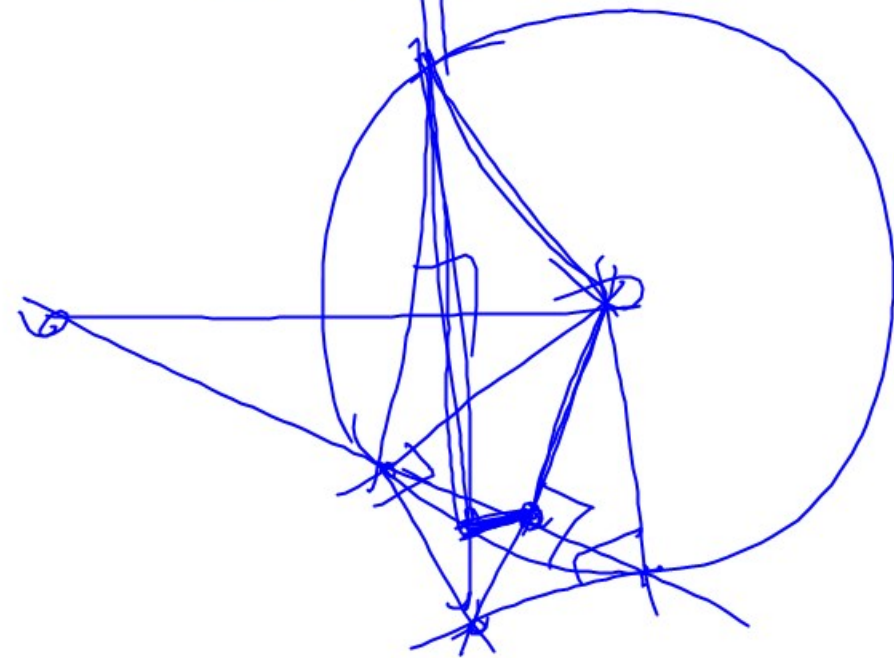
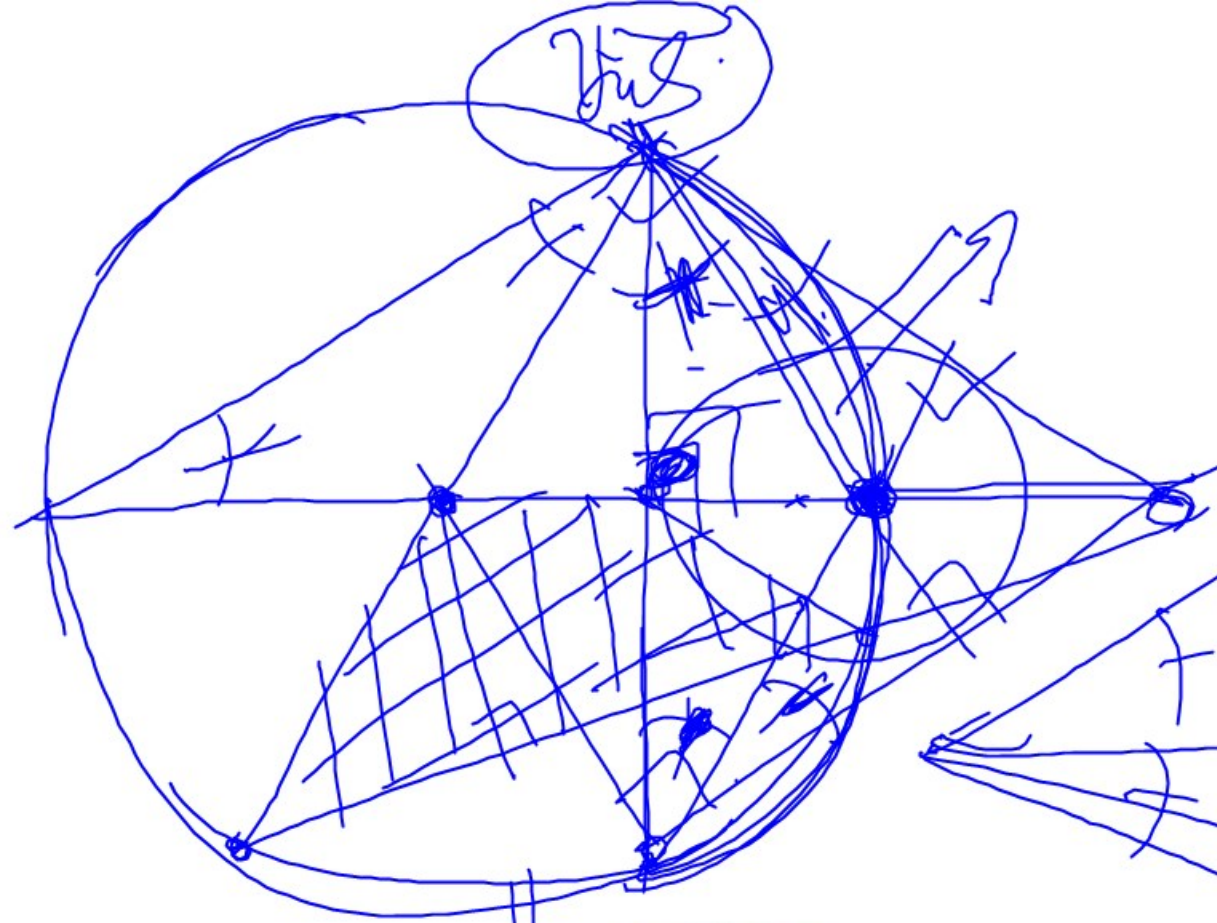
$$= SM \cdot SI$$



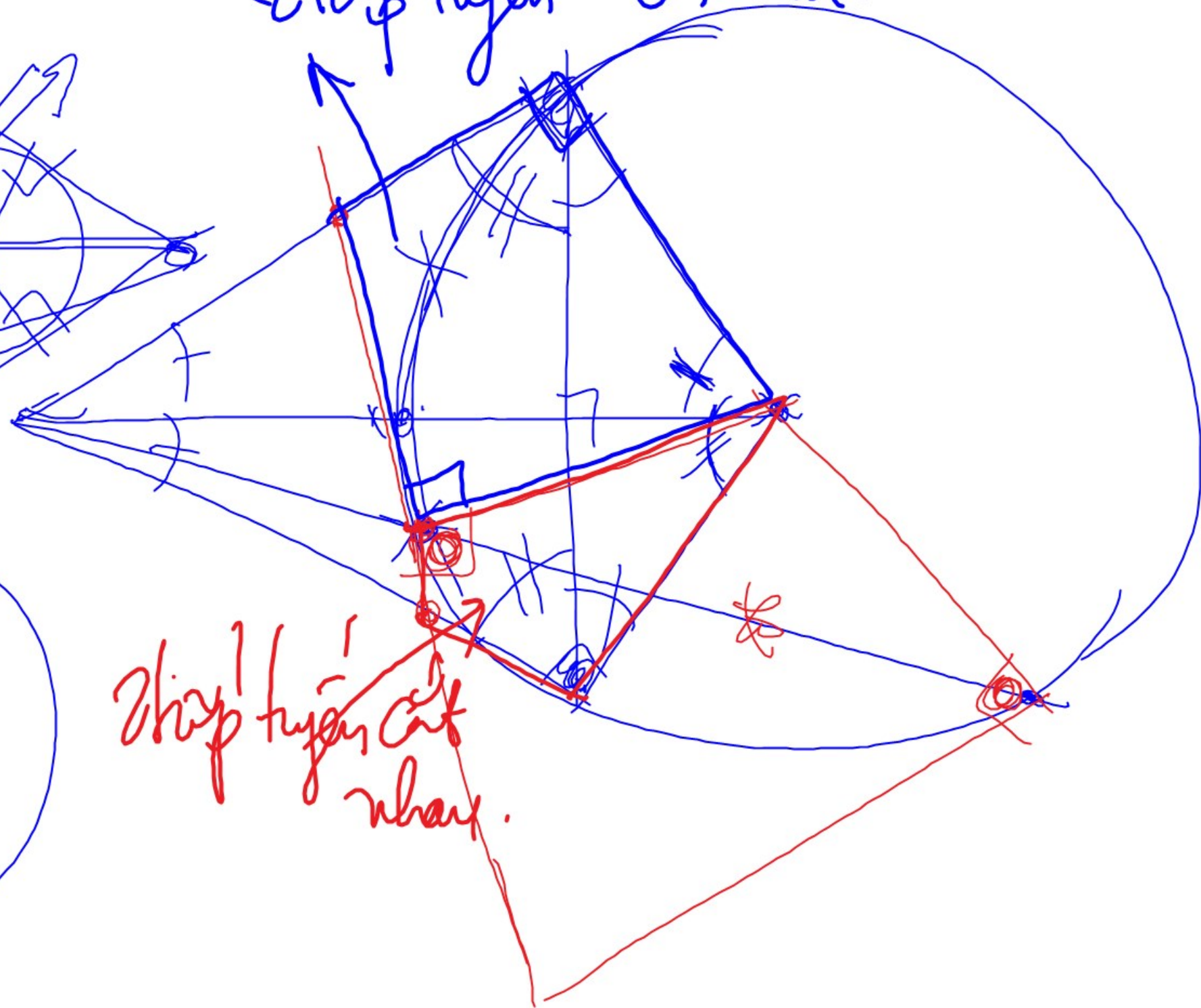
ΔSAT cân tại S

$\Rightarrow \widehat{B_1} = \widehat{Q_1}$
 $\Rightarrow SA$ là tiếp tuyến



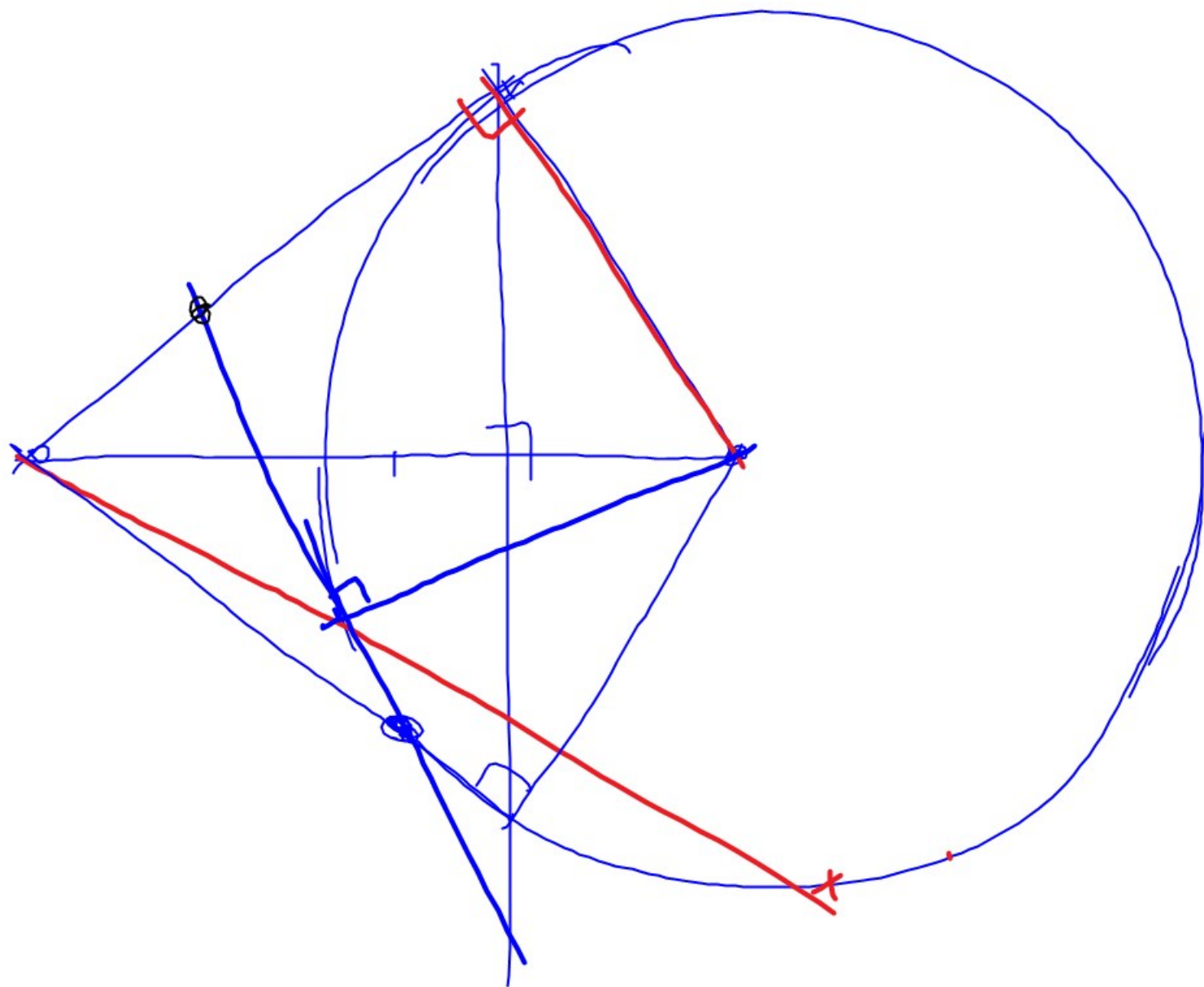


2 tiếp tuyến cắt nhau.



2 tiếp tuyến cắt nhau.

102 2021 Real



102 Real TS/H18

