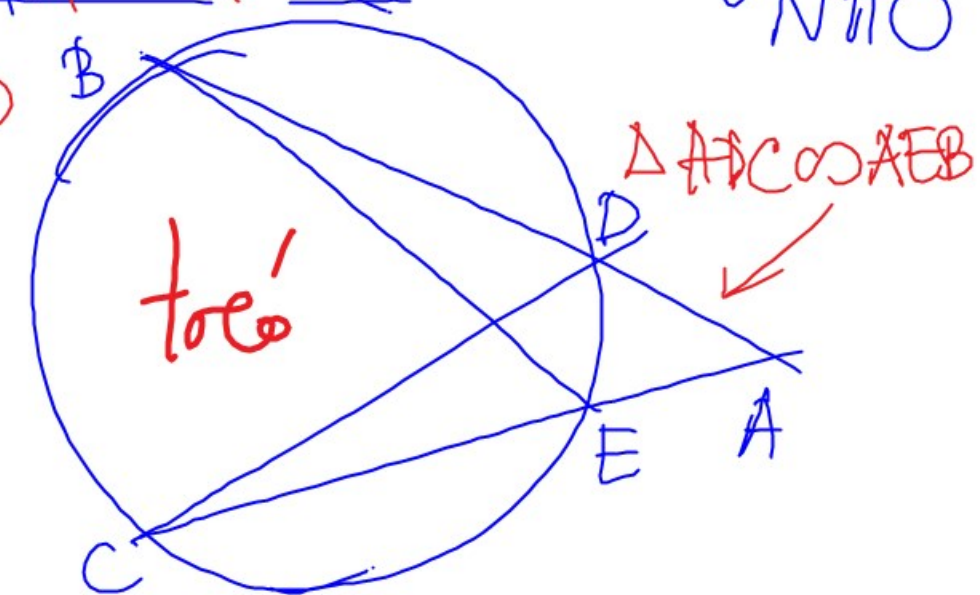
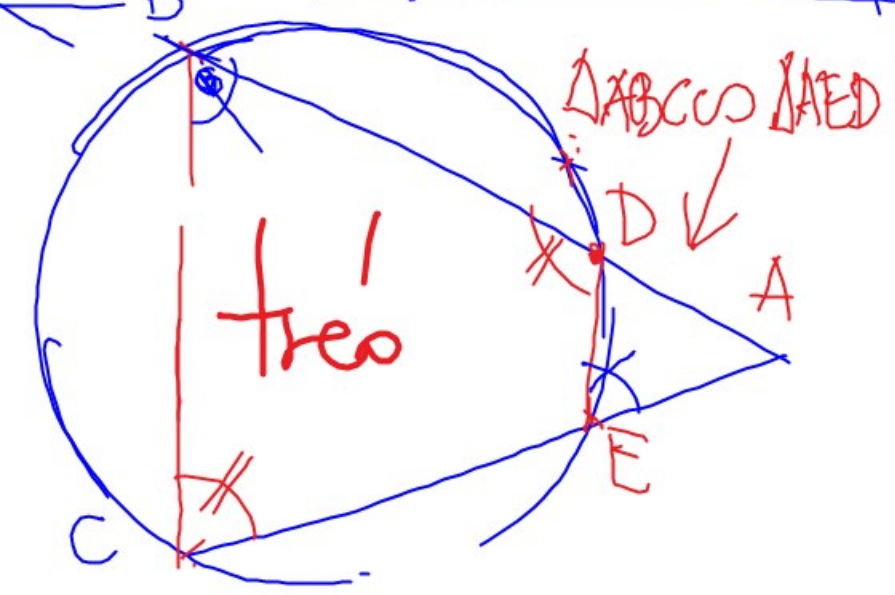
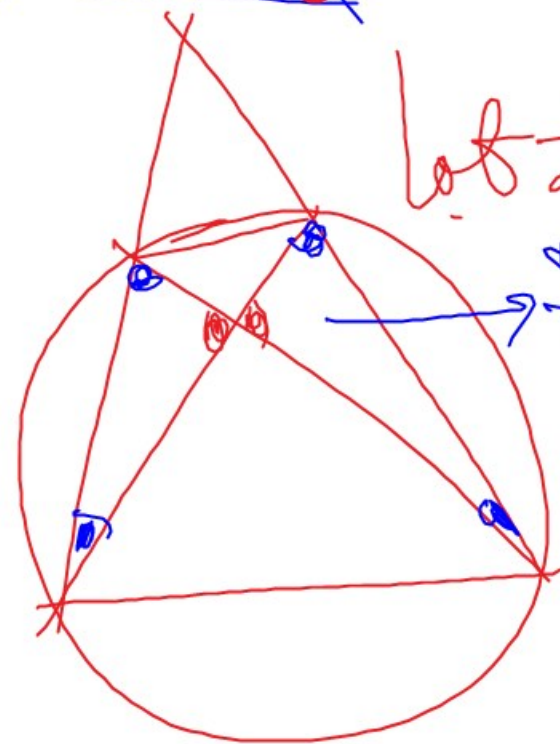
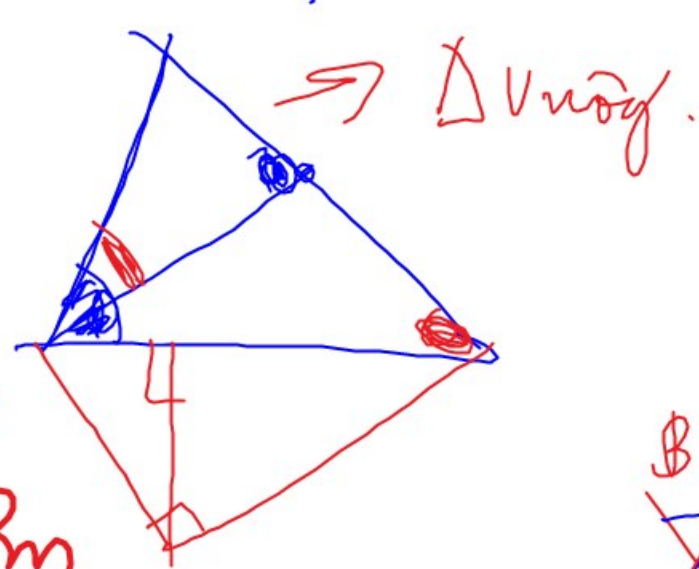
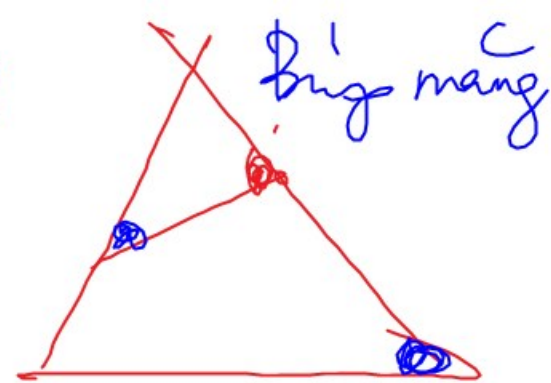
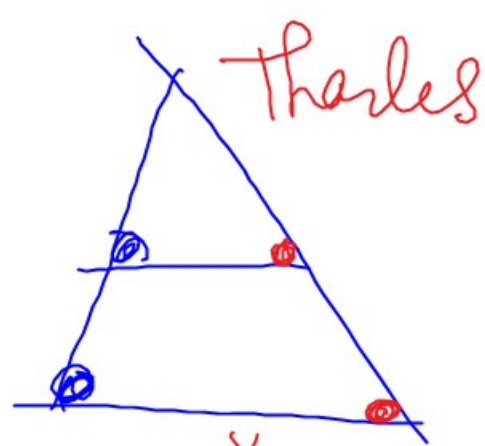
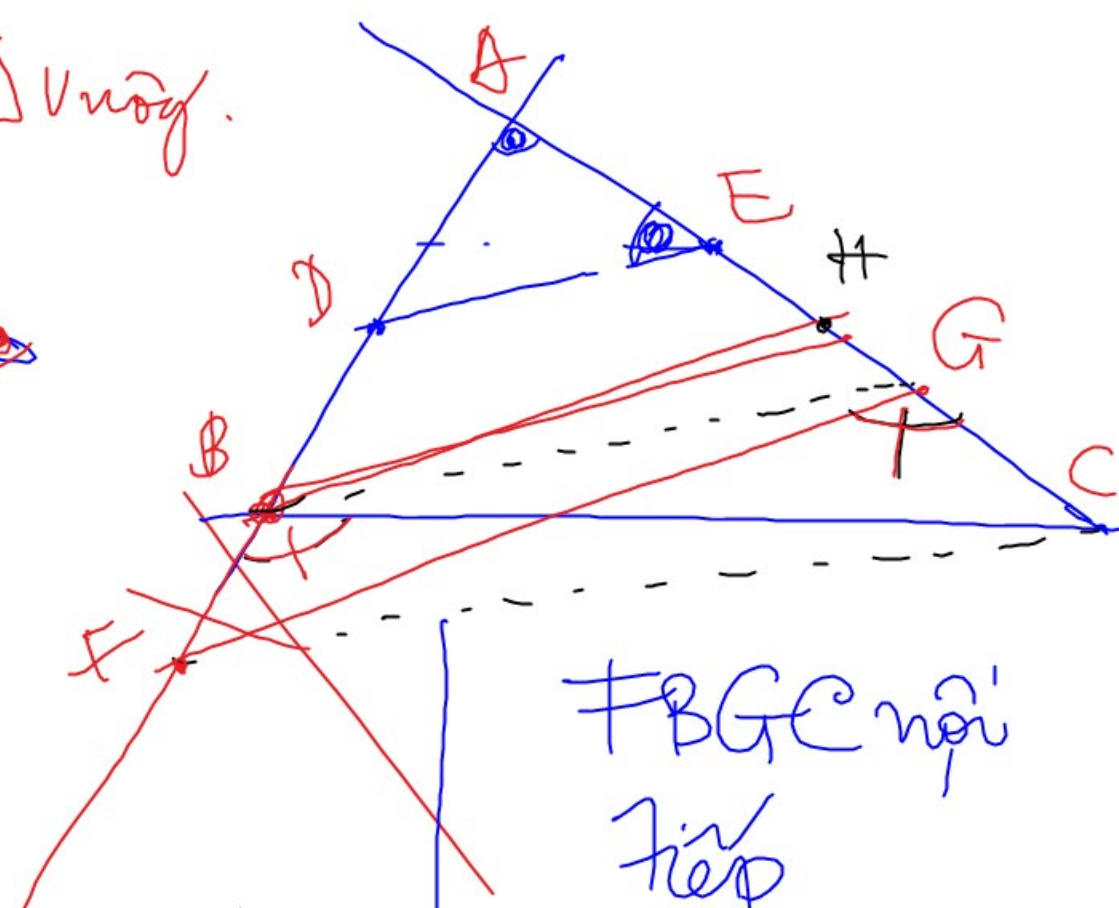
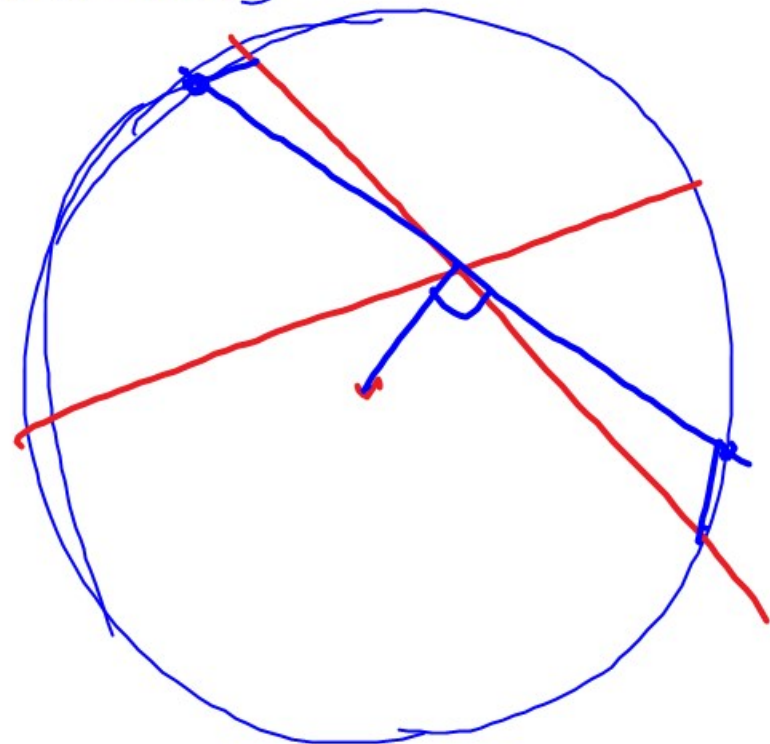


$AC^2 = CD \cdot CB$
 treó
 Cũng giống như
 LON





Định lý 1
Định lý 2
Định lý 3



$$\frac{AG}{AF} = \frac{AB}{AC}$$

$$\Delta AGB \sim \Delta AFE$$

$$\Delta AGF \sim \Delta ABC$$

- $\triangle BDF \sim \triangle EDE \Rightarrow BD \cdot DE = DF \cdot DE$ (Bảng 1)
- $\triangle BDA \sim \triangle HDE \Rightarrow BD \cdot DC = DH \cdot DA$ (Mặt cắt con)

• Lấy tiếp $\triangle BDA \sim \triangle BFE$

• $\triangle HFA \sim \triangle HDE$ (đôi đỉnh \rightarrow Đỉnh)

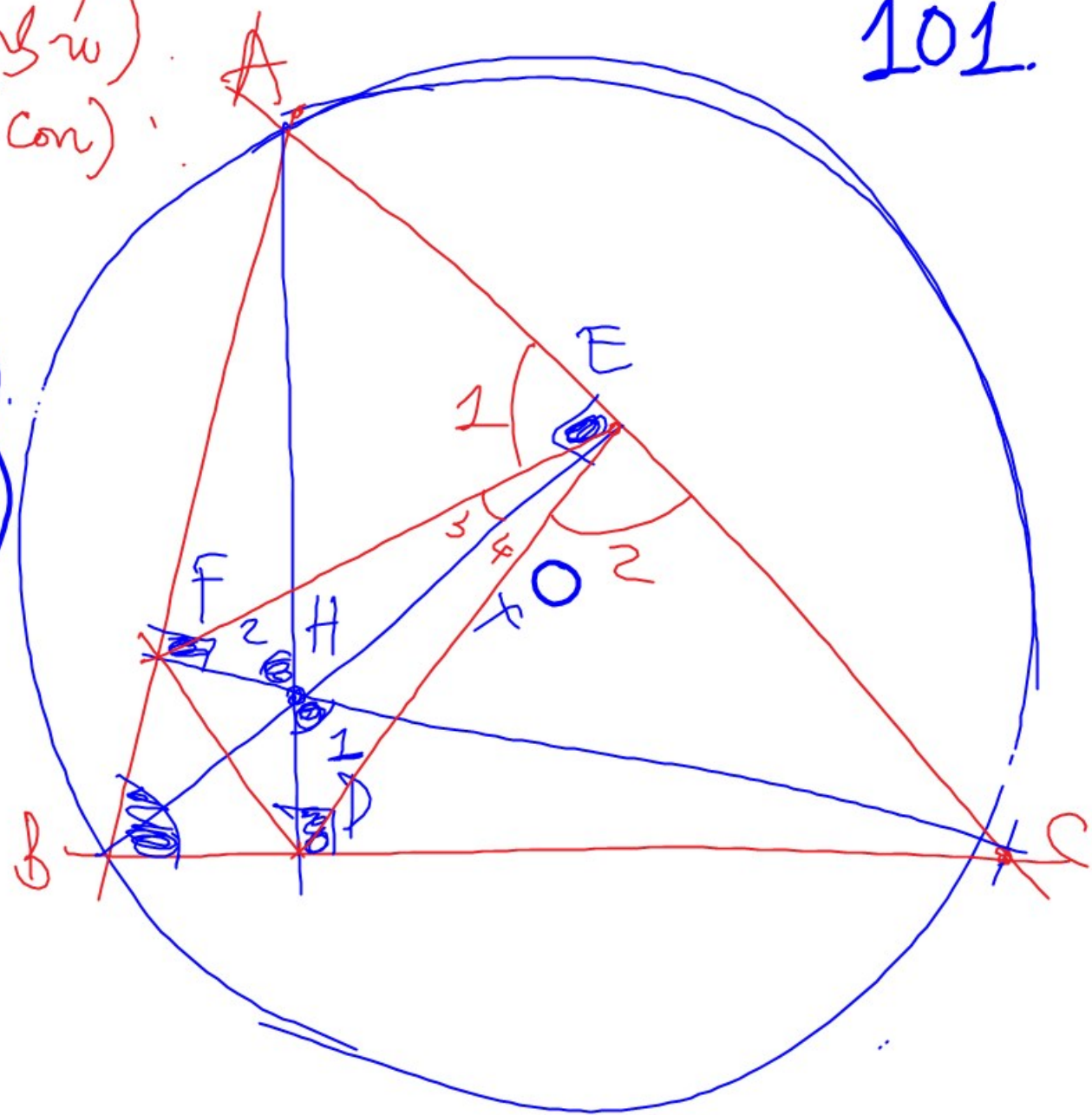
• $AF \cdot AB = AH \cdot AD = AE \cdot AC$ (Bất đẳng thức)
(Cắt tuyến chung)

$$\hat{B} = \hat{H}_1 = \hat{H}_2 = \hat{E}_1 = \hat{E}_2$$

• $\hat{E}_3 = \hat{E}_4$ } Chân đường cao và đỉnh đôi
đỉnh là tia phân giác

$$\hat{FDE} = 2\hat{FBE} \times$$

$$\cos \hat{A} = \frac{EF}{BC}$$



$$x \cdot y \quad AF, AB = AH, AD = AE, AC \cdot x$$

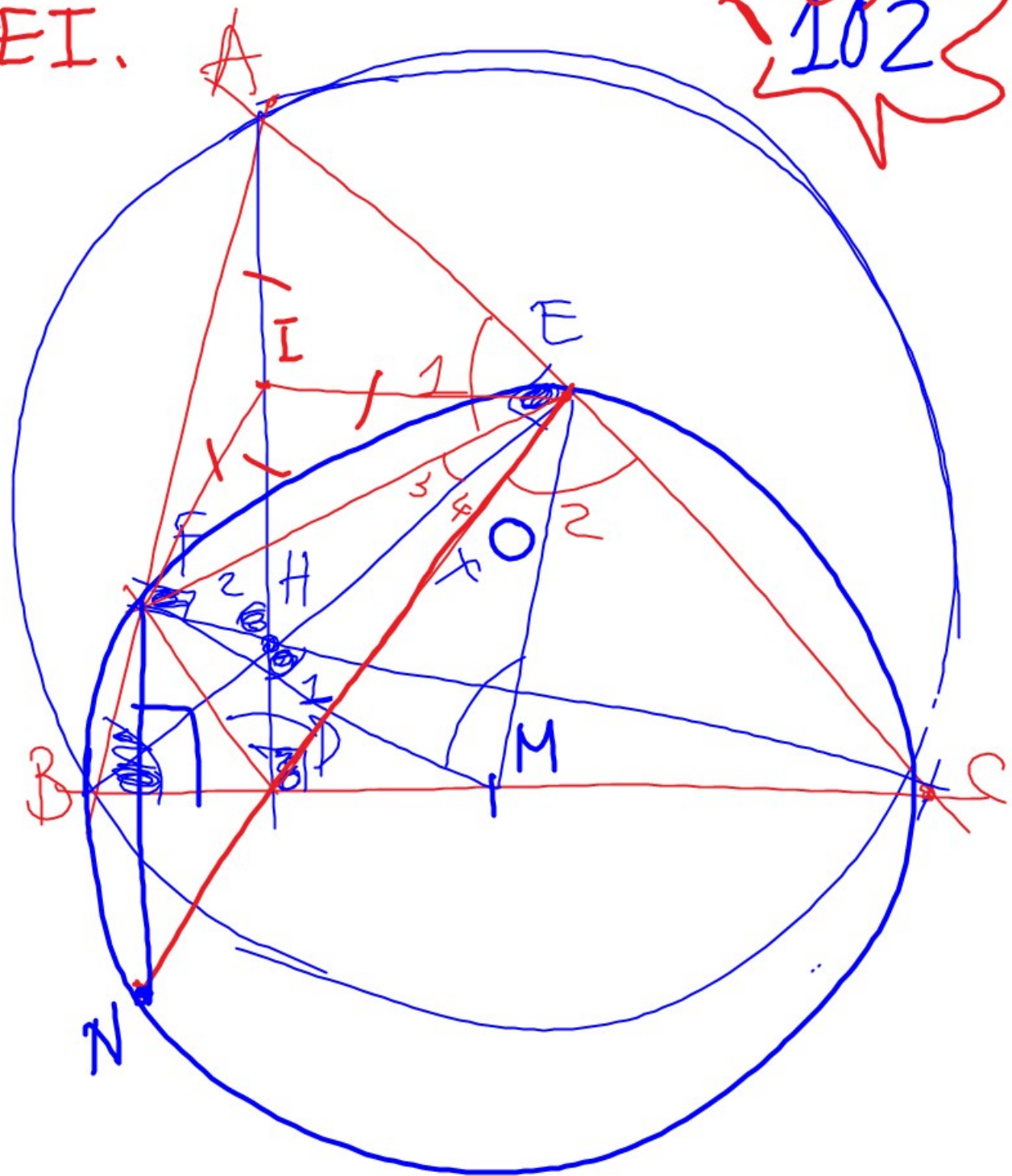
The diagram shows a circle with several points and lines. Points A, B, and C are on the circle. A' is a point outside the circle. E is a point on the circle. F, H, O, and M are points inside the circle. Lines connect these points in various ways, with some lines being red and others blue. There are also some handwritten numbers and symbols, such as '1', '2', '3', '4', '5', '6', '7', '8', '9', '10', '11', '12', '13', '14', '15', '16', '17', '18', '19', '20', '21', '22', '23', '24', '25', '26', '27', '28', '29', '30', '31', '32', '33', '34', '35', '36', '37', '38', '39', '40', '41', '42', '43', '44', '45', '46', '47', '48', '49', '50', '51', '52', '53', '54', '55', '56', '57', '58', '59', '60', '61', '62', '63', '64', '65', '66', '67', '68', '69', '70', '71', '72', '73', '74', '75', '76', '77', '78', '79', '80', '81', '82', '83', '84', '85', '86', '87', '88', '89', '90', '91', '92', '93', '94', '95', '96', '97', '98', '99', '100', '101', '102', '103', '104', '105', '106', '107', '108', '109', '110', '111', '112', '113', '114', '115', '116', '117', '118', '119', '120', '121', '122', '123', '124', '125', '126', '127', '128', '129', '130', '131', '132', '133', '134', '135', '136', '137', '138', '139', '140', '141', '142', '143', '144', '145', '146', '147', '148', '149', 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$$\sin \widehat{BAC} = \frac{BC}{2R} = \frac{BC}{2} \cdot R = \sin \widehat{MOC}.$$

$$At = BC \Rightarrow \widehat{BAC} = 45^\circ$$

Euler (Ole) / $\widehat{FDE} = \widehat{PDI} = \widehat{FEI}$.
 $\bullet FN \perp AB$.

1023



$\Delta NHCN$

BK là trung trực HK

Hình thang
có 2 đáy
bằng nhau.

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• $HBCN$ là hình bình hành.

• $HD = DK \Rightarrow \Delta HEK$ cân và có ΔFKH .

• $HC = CK = BN \Rightarrow BKN$ là hình thang

• Δ vuông ADC có Δ vuông ABN .

• $AH^2 + BC^2 = BH^2 + AC^2 = CH^2 + AB^2 = 4R^2$

• $OA \perp EC$ (Kẻ \perp thêm, tiếp tuyến tại A để cm).

$\Rightarrow AN$ là trung trực PQ .

• $AP^2 = AE \cdot AC$ và $BQ^2 = BF \cdot BA$.

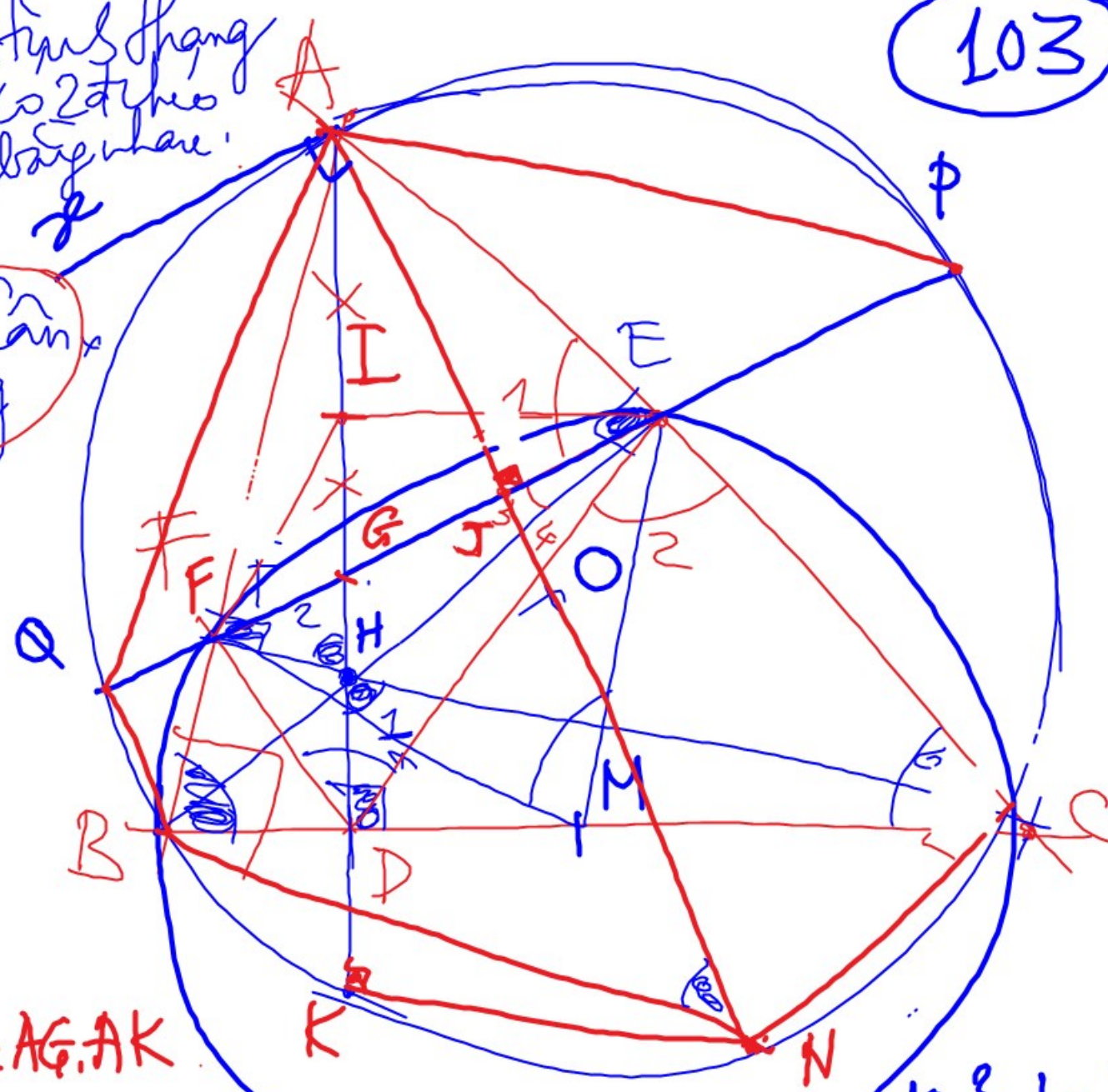
$\Rightarrow JECN$ & $JFBN$ nội tiếp & $KGJN$

• $AF \cdot AB = AH \cdot AD = AE \cdot AC = AJ \cdot AN = AG \cdot AK$

• $AB \cdot AC = AD \cdot 2R$

• $AD^2 + DC^2 + DH^2 + DB^2 = 4R^2$

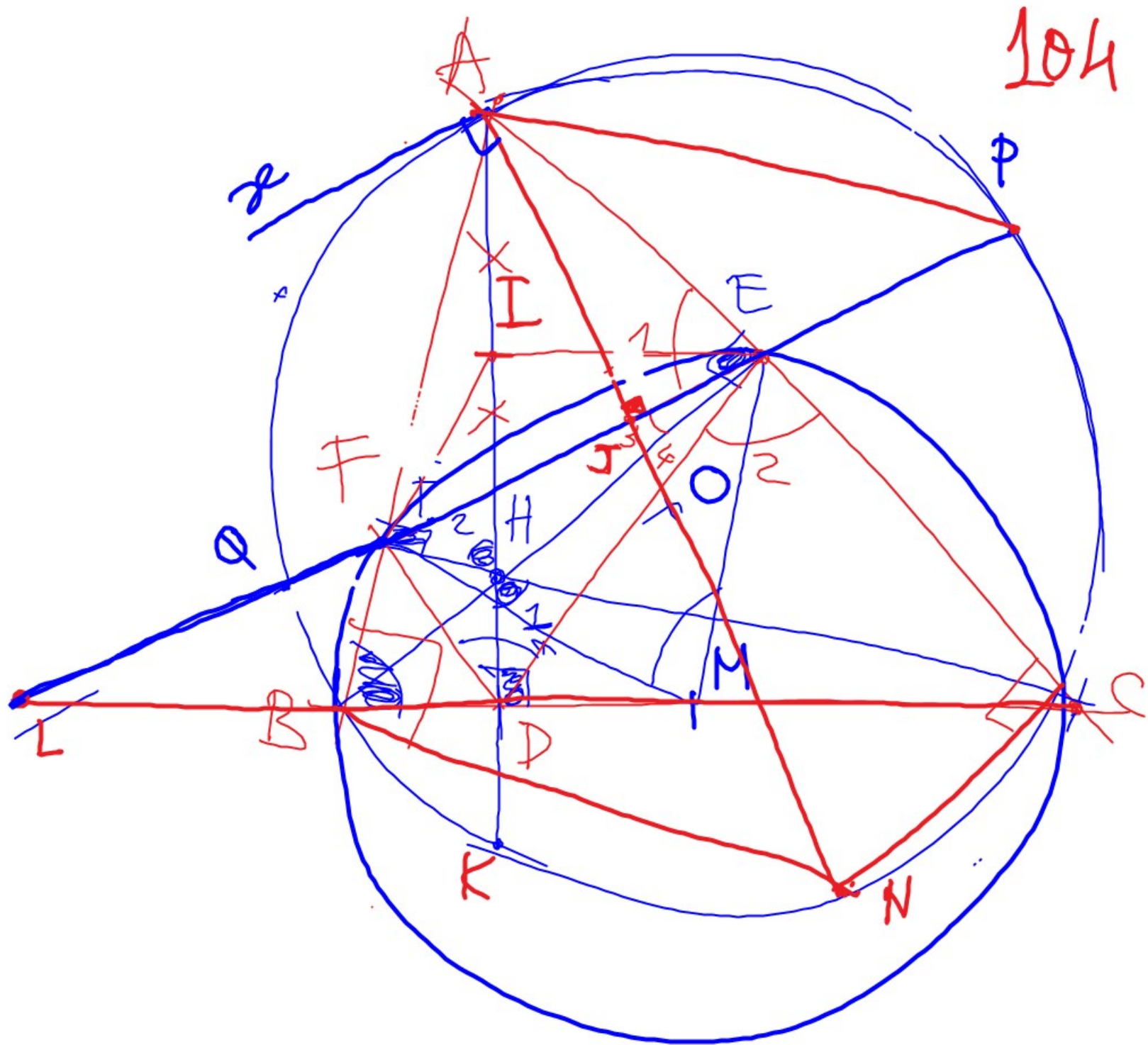
Cân



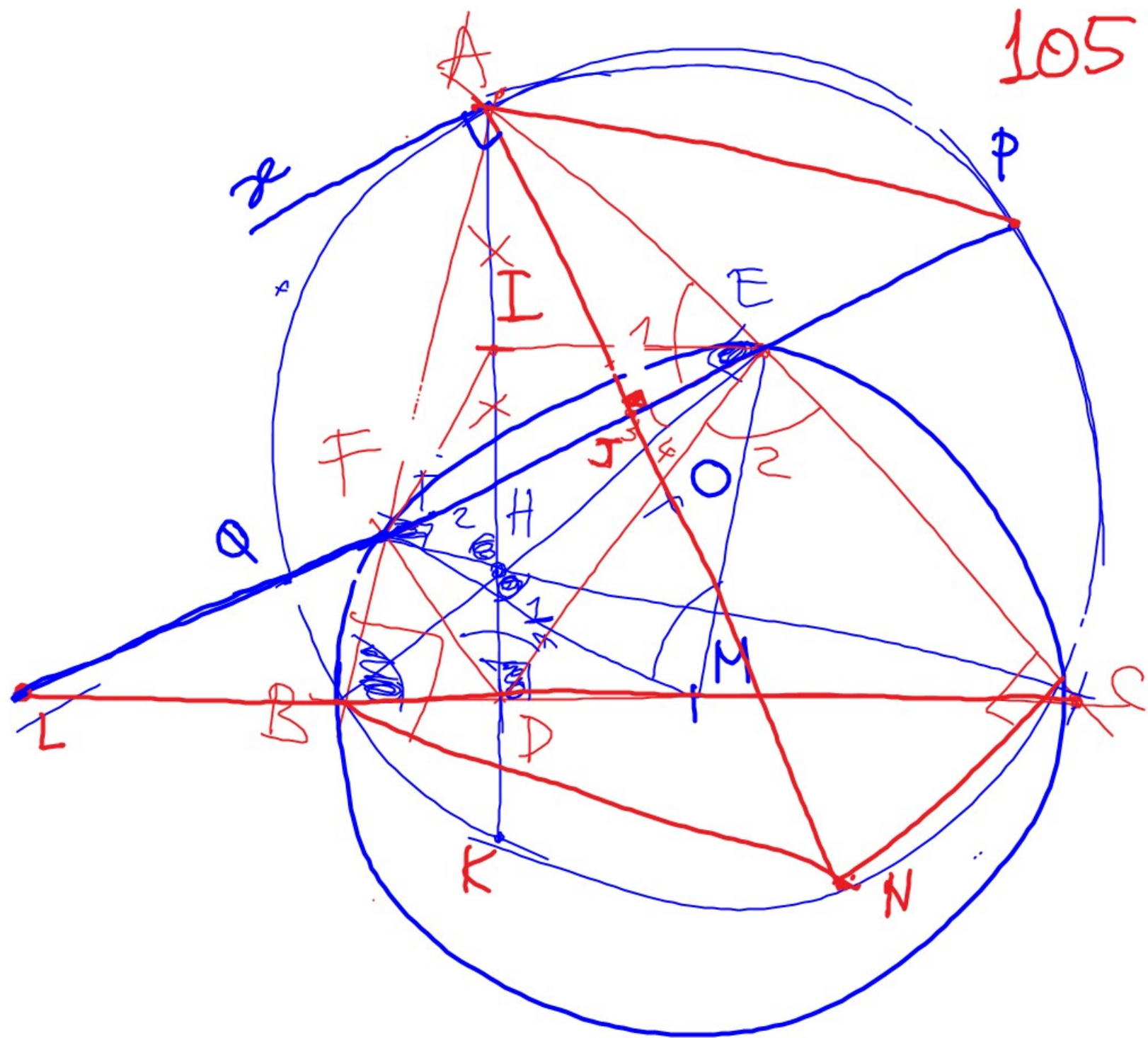
• $MO \parallel AH$ & $MO = \frac{1}{2}AH$ (H, M, N thẳng hàng).

• $DM \parallel KN$ & $DM = \frac{1}{2}KN$

Silm Son / $\oint_{ABC} = \frac{AB \cdot AC \cdot BC}{4R}$



Sim Son



$$\left(\frac{1}{3}\right) \begin{matrix} 2 \\ x = 2400\sqrt{3} \end{matrix}$$

$$x = 20\sqrt{6} \cdot \sqrt{3}$$

$$\textcircled{20\sqrt{2}}$$

$$\Rightarrow R = \frac{1}{3}x = 20\sqrt{2}$$

$$2, 20\sqrt{2} \cdot 10,$$

$$x \cdot \frac{x}{\sqrt{3}} = 2400$$

$$x^2 = 2400\sqrt{3}$$

$$x = \sqrt{2400\sqrt{3}}$$

$$x = 20\sqrt{6} \cdot \sqrt{3} = 20\sqrt{18}$$

$$R \cdot R\sqrt{3} = \frac{1200}{\sqrt{3}} = 400$$

$$R^2 = \frac{400}{\sqrt{3}}$$

$$200 \cdot \frac{\sqrt{3}}{3}$$

$$20\sqrt{2} \cdot \sqrt{3} \cdot \sqrt{3}$$

$$\sqrt{3} \cdot \sqrt{3}$$

$$\begin{matrix} 20 & 20 \\ 12 & 20 \\ 6 & 20 \\ 3 & 20 \end{matrix}$$

