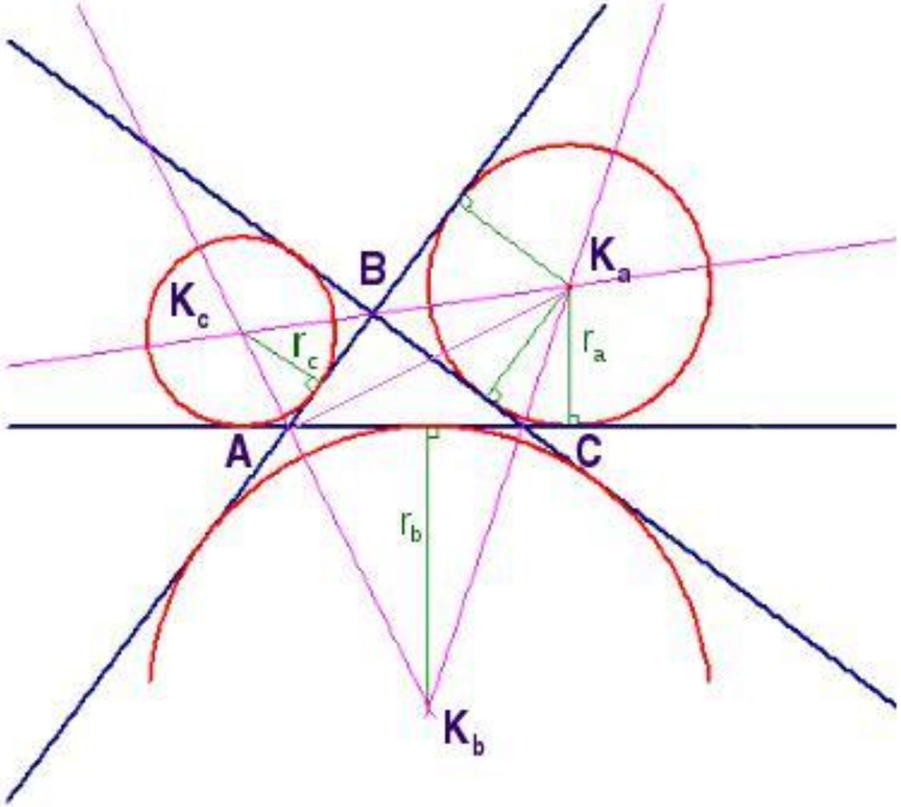
Вневписанная окружность



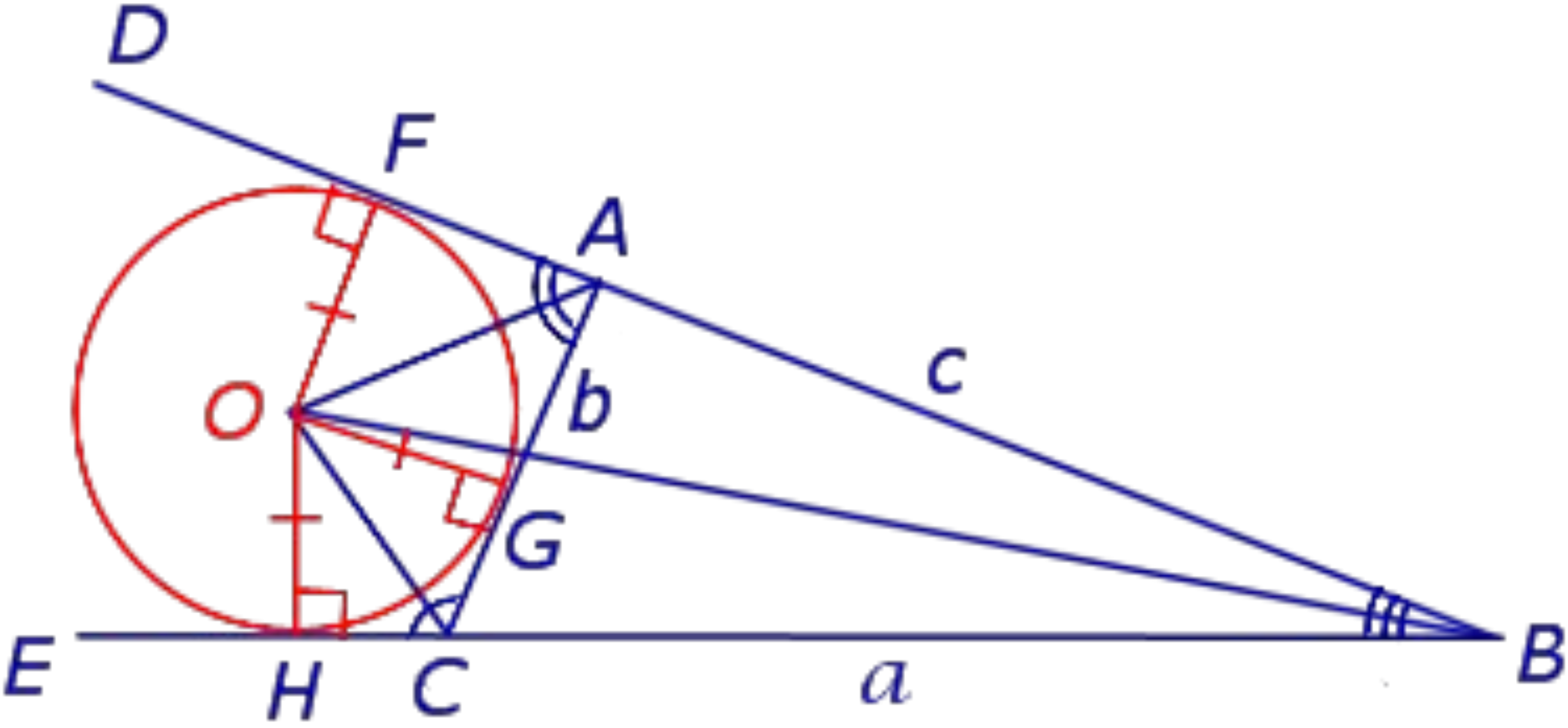
B
K_a
K_c
r_c
r_a
A
C
r_b
K_b

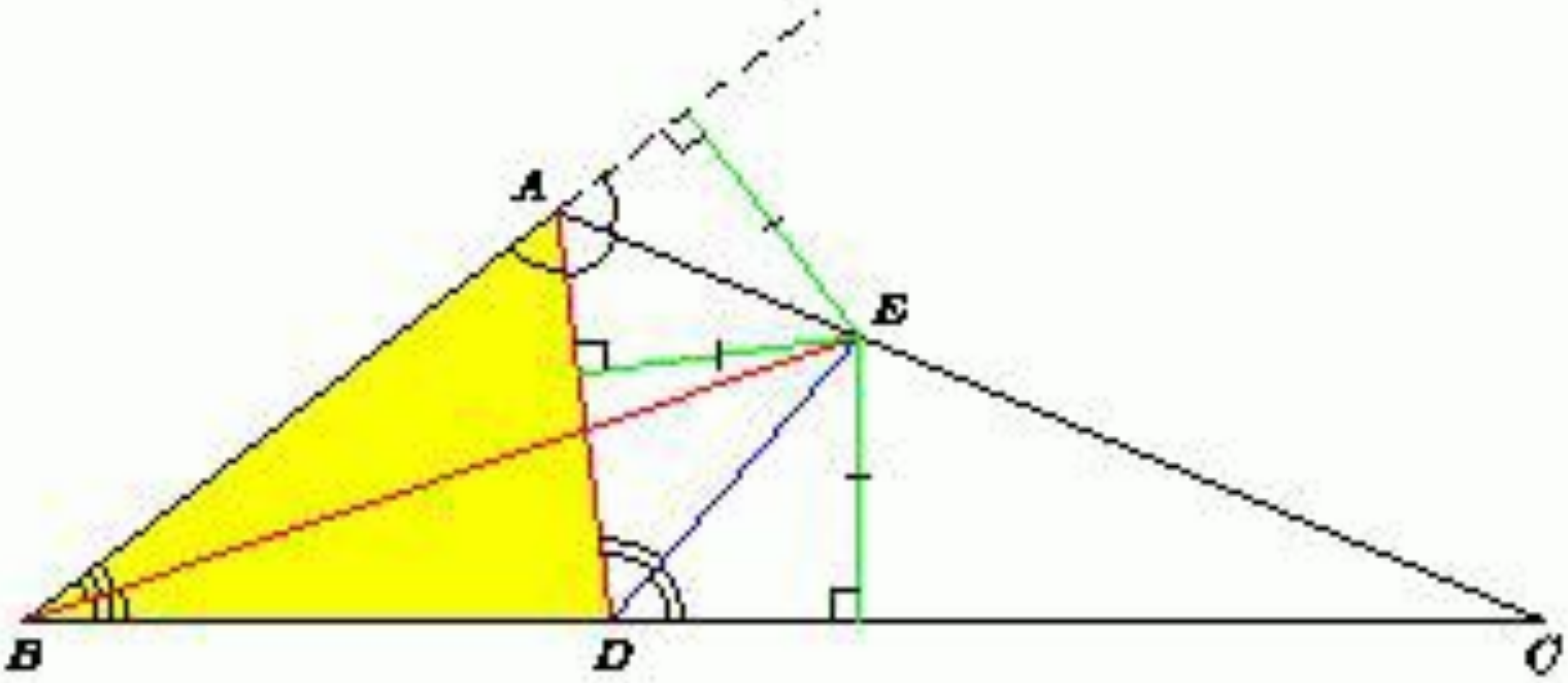
$$S = S_{\Delta ABC} = S_{\Delta BFO} + S_{\Delta BHO} - S_{\Delta AFO} - S_{\Delta AGO} - S_{\Delta CGO} - S_{\Delta CHO} =$$

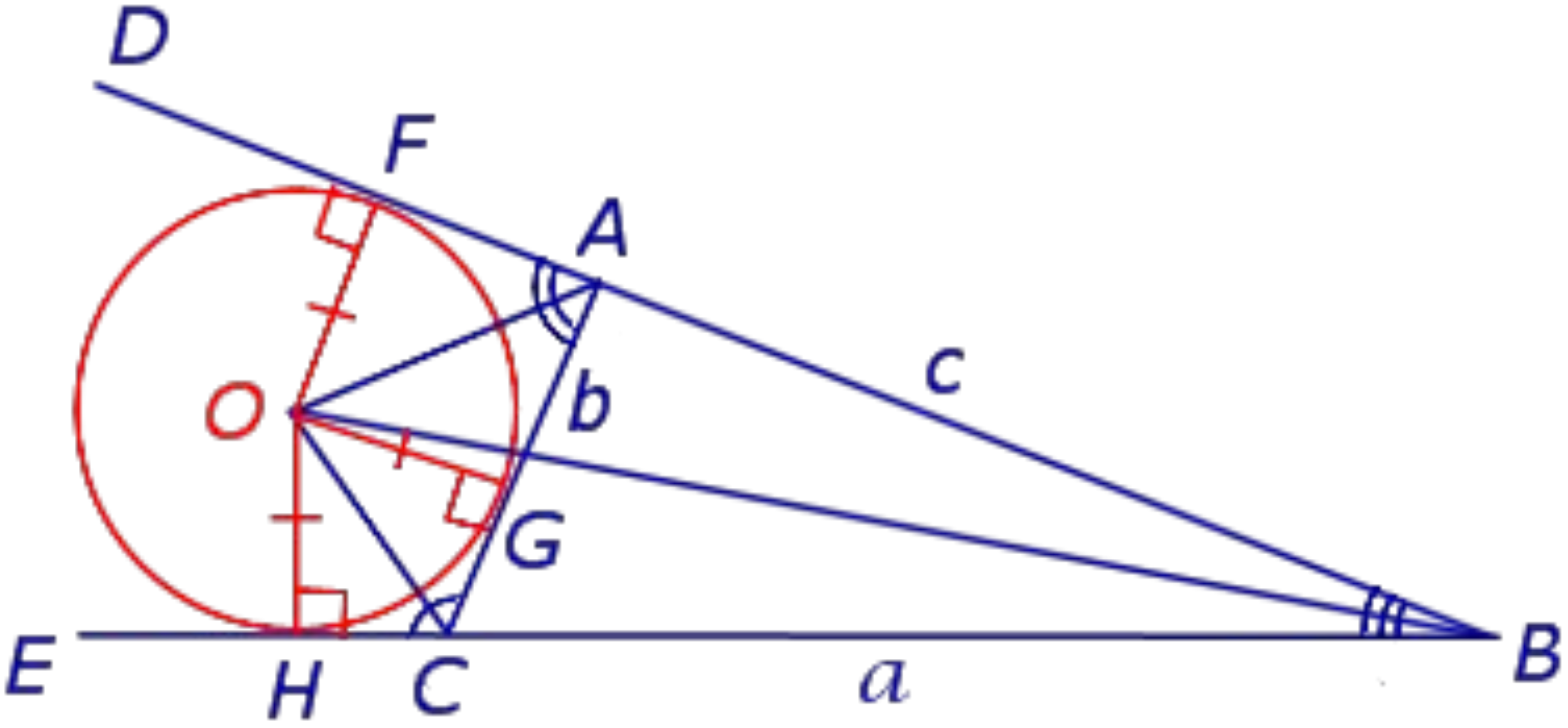
$$= \frac{1}{2} \cdot r_b \cdot FB + \frac{1}{2} \cdot r_b \cdot BH - \frac{1}{2} \cdot r_b \cdot AF - \frac{1}{2} \cdot r_b \cdot AG - \frac{1}{2} \cdot r_b \cdot CG - \frac{1}{2} \cdot r_b \cdot CH =$$

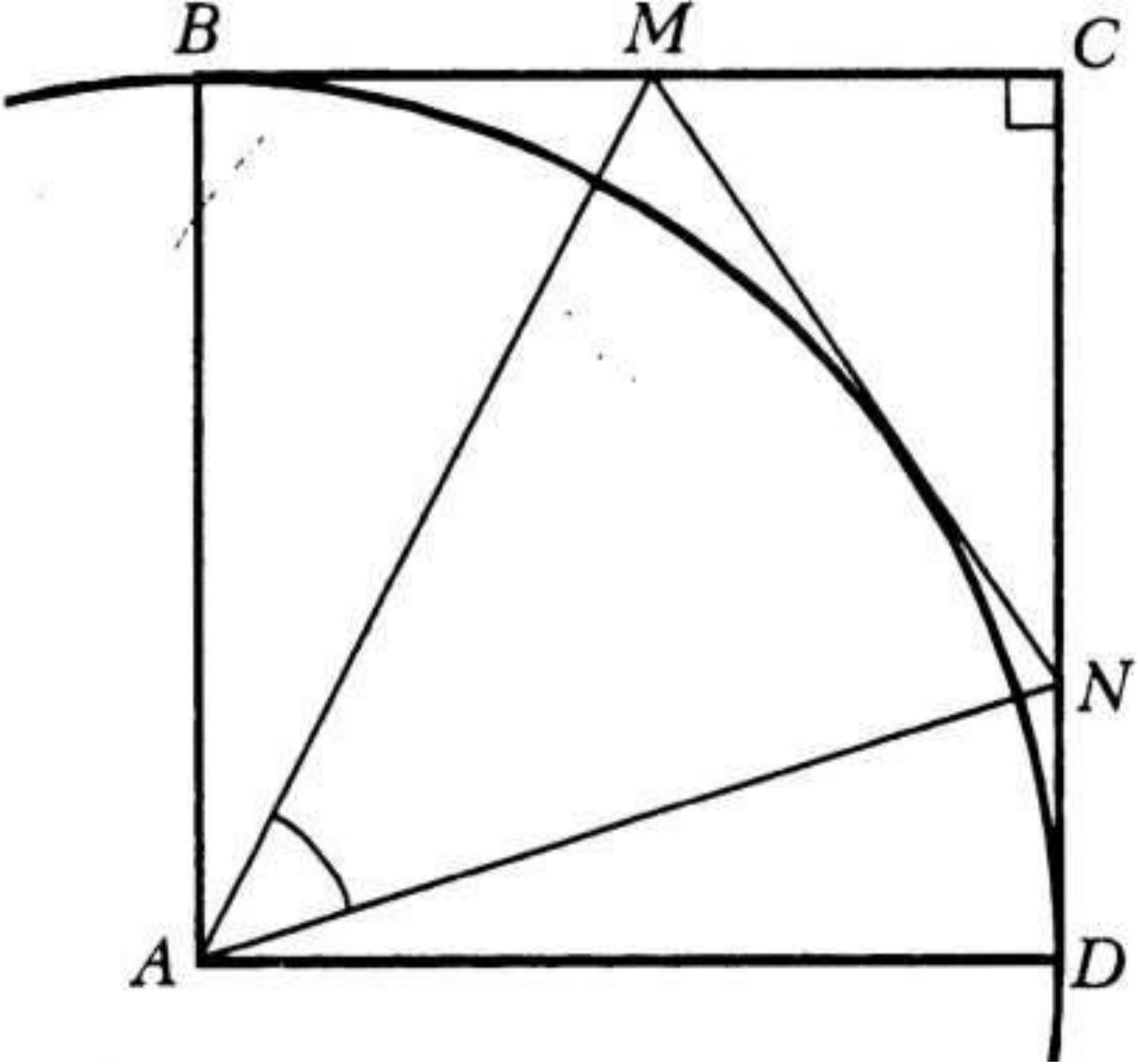
$$= \frac{1}{2} \cdot r_b \cdot p + \frac{1}{2} \cdot r_b \cdot p - \frac{1}{2} \cdot r_b \left(AF + AG + CG + CH \right) = r_b \cdot p - \frac{1}{2} \cdot r_b \cdot 2 \cdot b =$$

$$= r_b \left(p - b \right).$$




A
E
B
D
C


D
F
A
c
O
b
G
E
H
C
a
B


B
M
C
N
A
D