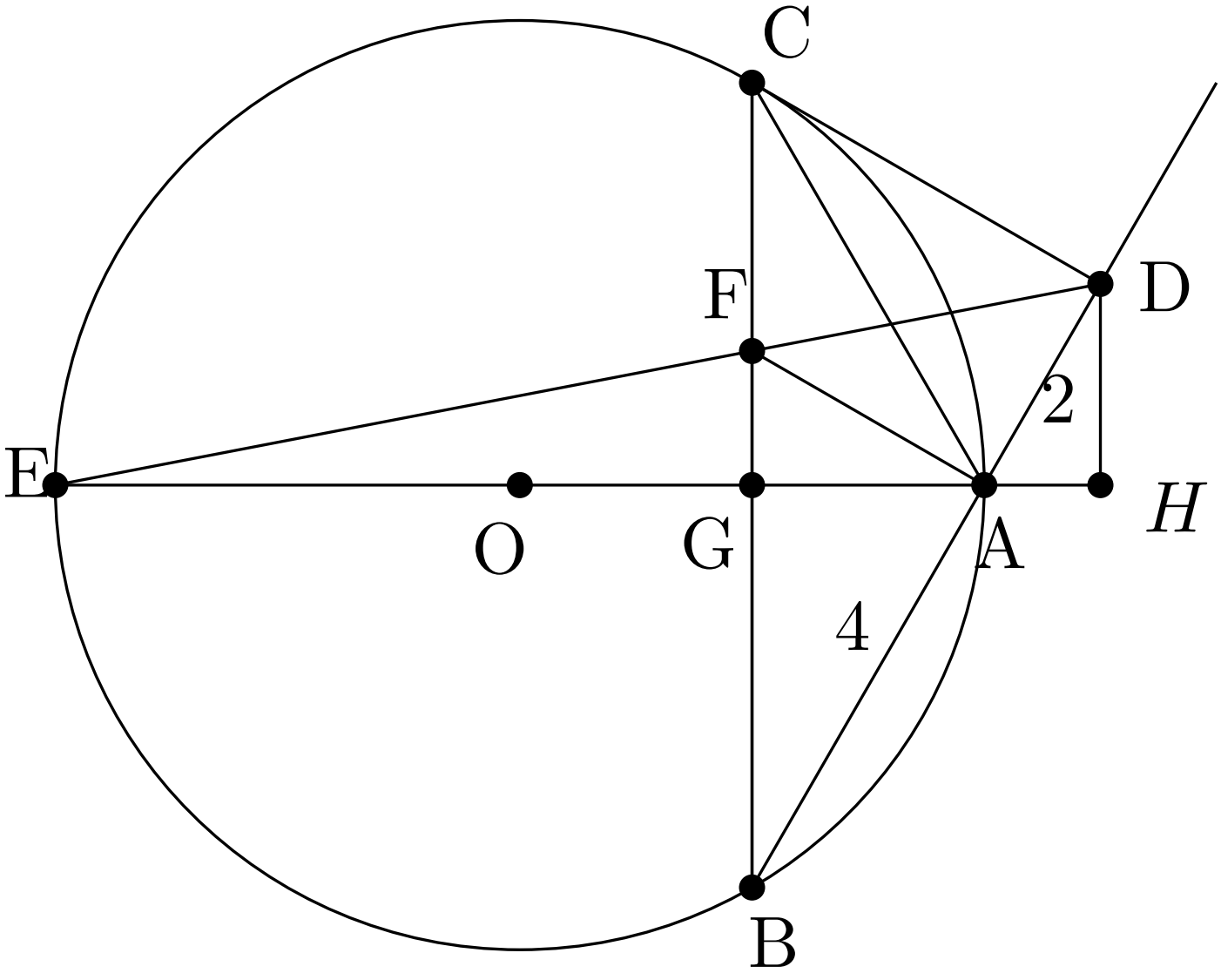

$AC = AC = 4, \angle BAC = \frac{2\pi}{3}, CD \perp AB, AF = ?$

$AH = 1, DH = \sqrt{3}, DH \parallel FG$

$$FH = \frac{EG}{EH} DH = \frac{2}{3}\sqrt{3}, AF = \sqrt{FG^2 + AG^2} = \frac{4}{\sqrt{3}}$$