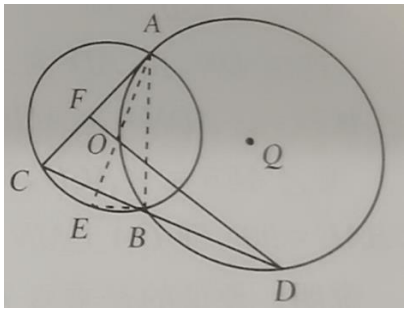


**Example 204 : As shown in Figure 1 ,** it is known that circle $O$ and circle $Q$ intersect at points $A$ and $B$, circle $Q$ passes through point $O$, $C$ is a point on the superior arc $AB$ *of* circle $O$ , *and* the extension line of $CB$ intersects circle $Q$ at point $D$. Prove: $DO \perp AC$.

Proof: $\dfrac{A-C}{D-O}=\dfrac{\dfrac{C-A}{C-B}\dfrac{D-B}{D-O}}{\dfrac{B-C}{B-A}\dfrac{A-B}{A-O}}\dfrac{C-B}{D-B}\dfrac{B-C}{A-O}$,