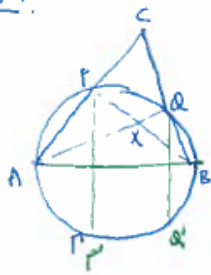


PROBLEM.



Let  $\Gamma$  be a circle and let  $A$  and  $B$  be diametrically opposite points.  
Let  $C$  be a point outside  $\Gamma$  such that the segments  $CA$  and  $CB$  intersect  $\Gamma$  in  $P$  and  $Q$  as shown. Let  $X = AP \cap BQ$ .  
Reflect  $P$  and  $Q$  across  $AB$  to make  $P'$ ,  $Q'$ , as shown.  
Prove that  $AB$ ,  $CX$ ,  $PQ'$ , and  $QP'$  are concurrent.