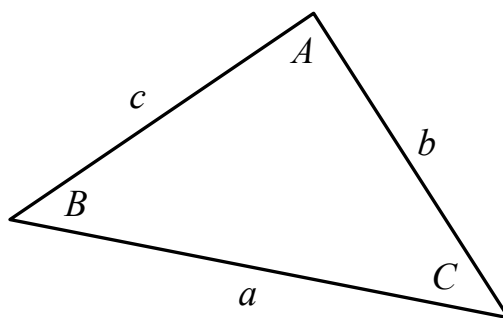


(25 Marks)

A triangle has sides a , b and c . The angles opposite a , b and c are A , B and C respectively.

(a) Prove that $a^2 = b^2 + c^2 - 2bc \cos A$.



(b) Using part (a), show that $b^2 - a^2 = c(b \cos A - a \cos B)$.