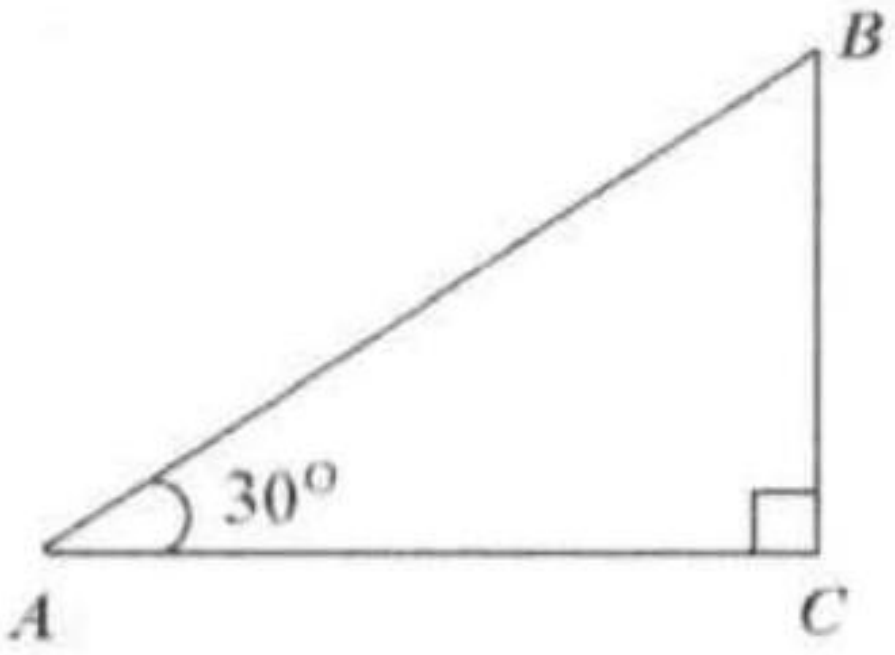
Show that for right triangle, if $\angle A = 30°$, then $BC = \frac{1}{2}AB$.

Proof: Draw the median $MC$. Since $MC$ is the median, $MC = AM = MB$.



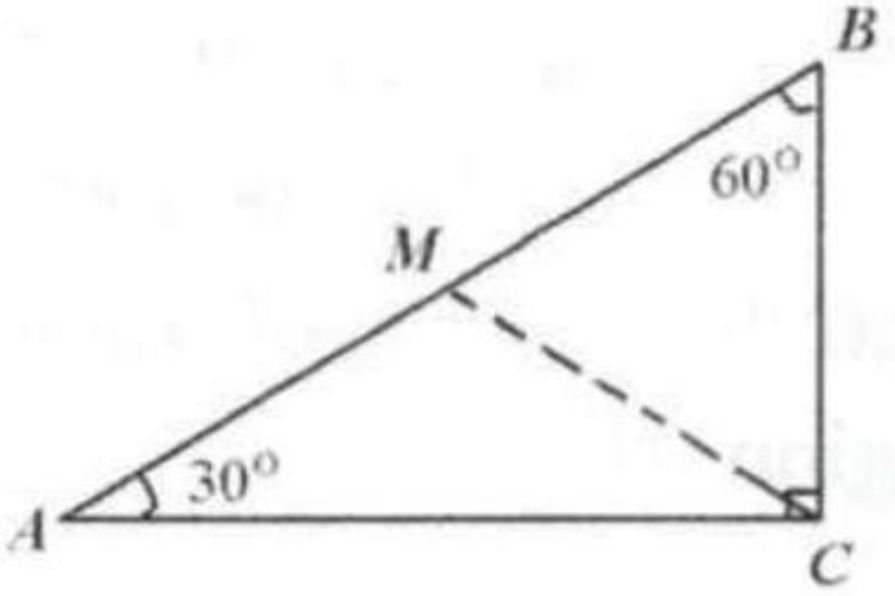

Triangle $AMC$ is an isosceles triangle with $\angle MAC = \angle MCA = 30°$.

Since $\angle BMC$ is the exterior angle of triangle $AMC$,

$\angle BMC = \angle MAC + \angle MCA = 30° + 30° = 60°$.

So, triangle $MBC$ is an equilateral triangle with $BC = MC = MB$.

That is $BC = \frac{1}{2}AB$.


B
60°
M
30°
A
C