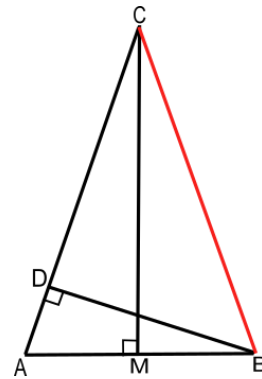


Author's Solution for Cash Award Question –Oct' 2024

"Our Author is well-known for giving the simplest solution for complicated problems. And this is one such problem for which he has given the solution in just 3 lines"

Construction :

Join CB.



Proof:

CDB is right triangle with $CB = 2BD$. In a right triangle, if the hypotenuse is twice a side, then, it's a special triangle with 90° , 60° & 30° .

So, $\angle DCB = \angle ACB = 30^\circ$

So, $\angle A = 90^\circ - \frac{30}{2} = 75^\circ$
