

Lesson 2 Problem 6 Solution

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Problem 6.

Let the midpoint of AC be M . Since M lies on the circle with diameter AB , we know that $\angle AMD$ is half of the arc AB . Since AB is the diameter, the arc is 180° , so $\angle AMB = 90^\circ$. Thus BM is both the median and the altitude in $\triangle ABC$. Then it is isosceles, and therefore has angles $45^\circ, 90^\circ, 45^\circ$.