

## Lesson 2 Problem 4 Solution

Konstantin Miagkov

October 21, 2018

**Problem 2.**

Let  $M$  be the midpoint of  $AC$ . If  $M$  lies on the circle with diameter  $AB$ , then  $\angle AMB = 90^\circ$ . Then  $AM$  is the altitude of  $\triangle ABC$ . But it is also the median, which implies that  $BA = BC$ .