$$\overline{AB} = \overline{AM} + \overline{MB}, \quad \overline{AC} = \overline{AM} + \overline{MC},$$

vagyis, mert

$$\overline{MB} + \overline{MC} = 0,$$

azért

$$\overline{AB} \cdot \overline{AC} = \overline{AM}^2 + \overline{AM}(\overline{BM} + \overline{MC}) + \overline{MB} \cdot \overline{MC} = \overline{AM}^2 + \overline{MB} \cdot \overline{MC}$$

Ámde

$$\overline{MB} \cdot \overline{MC} = \left(\frac{\overline{BC}}{2}\right) \cdot \left(-\frac{\overline{BC}}{2}\right) = -\frac{\overline{BC}^2}{4},$$

tehát

$$\overline{AB} \cdot \overline{AC} = \overline{AM}^2 - \frac{\overline{BC}^2}{4}.$$

(Molnár János, Temesvár.)