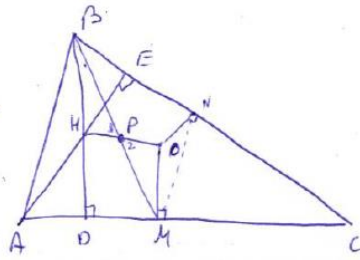


1.64
6



$\triangle ABC \sim \triangle MNH$ (i.p.)
 $\angle BAC = \alpha$ (i.p.)
 $\Rightarrow \angle MNC = \alpha$ (alt. angles)
 $\Rightarrow \angle OMN = 90 - \alpha$
 $\angle ABD = 90 - \alpha$ ($\triangle ABD$)
 $\angle ABE = \beta$
 $\angle MNC = \beta$ (i.p.)
 $\angle BAH = 90 - \beta$ ($\triangle ABE$)

$\angle OMN = 90 - \beta \iff$ (i.p.) $\angle MNC = \beta$

(s.s) $\triangle ABH \sim \triangle MNO$

$\frac{1}{2} = \frac{MN}{AB} = \frac{ON}{AB} \iff$ (i.p.) $MN = \frac{1}{2} AB$

(alt. angles) $\angle OBM = \angle MPO \iff OM \parallel BD$
 (alt. angles) $\angle P_1 = \angle P_2$

(s.s) $\triangle BHP \sim \triangle POM$

$\frac{BH}{MO} = \frac{1}{2} = \frac{BP}{PM}$

הנקודה P מחלקת את BH ברוח 2:1
 והנה הנקודה P היא מרכז המסתובב