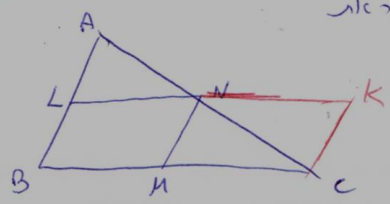


3.99
3

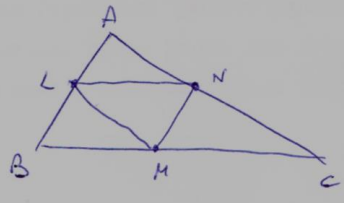
(10)



אלו שני הטרפזים LN הם שווים
CAYK

$\triangle ALN \cong \triangle NKC$
 $\triangle ALN \cong \triangle NKC$
 $\triangle ALN \cong \triangle NKC$
 $AL = LN = NK = KC$
 $BL = LN = NC = CK$
 $LM = \frac{1}{2}LK = \frac{1}{2}BC$

(7)



$LN = \frac{1}{2}BC$
 $NM = \frac{1}{2}AB$
 $LM = \frac{1}{2}AC$
 $\triangle ABC \sim \triangle LMN$
 (3.3.3)

$\triangle AHB$:

אנחנו 2 מ/3 ה (5.1)

$(\triangle ABX) \angle ABH = 90 - \angle A$
 $(\triangle ABY) \angle BAH = 90 - \angle B$

$\triangle ONM$:

$NM \parallel AB$

$\Rightarrow \angle CNM = \angle A, \angle ONC = 90^\circ$
 $\angle CMN = \angle B, \angle OMC = 90^\circ$
 $\left. \begin{matrix} \angle ONC = 90^\circ \\ \angle OMC = 90^\circ \end{matrix} \right\} \begin{matrix} ON, OM \\ \text{אנחנו 2 מ/3 ה} \end{matrix}$

$\Rightarrow \angle OMN = \angle OMC + \angle MNC = 90 - \angle B$
 $\angle ONM = \angle ONC - \angle MNC = 90 - \angle A$

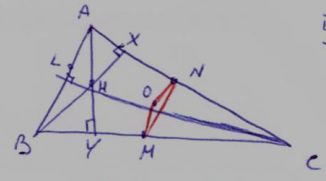
(S.S) $\triangle AHB \sim \triangle M ON$

אנחנו 2 מ/3 ה אנחנו 2 מ/3 ה

(8)

$$\frac{AH}{OM} = \frac{AB}{MN} = 2$$

$$\Rightarrow AH = 2OM$$



אנחנו 2 מ/3 ה
 $\triangle AHB \sim \triangle M ON$