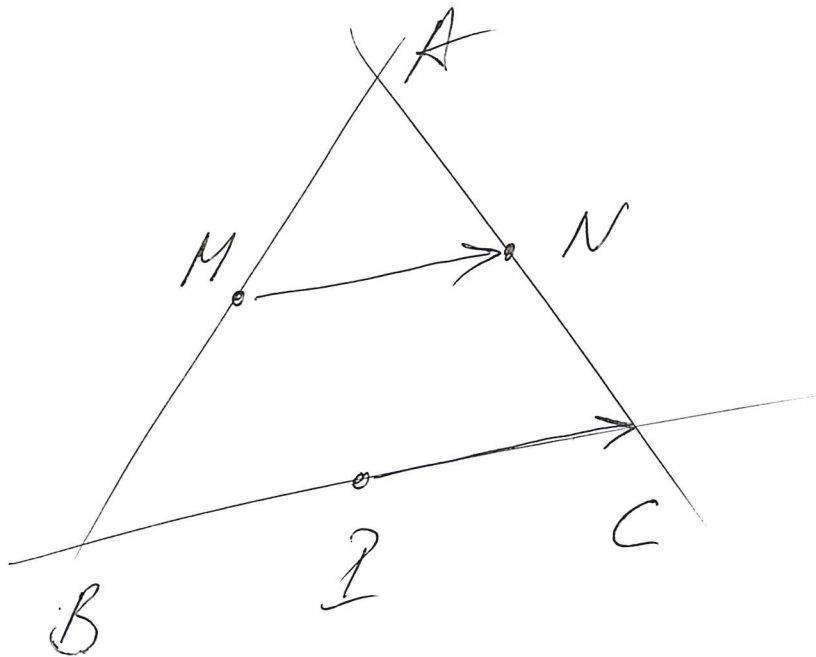


1.3.18

Indications



On utilise le thm du segment moyen:

$$\overrightarrow{MN} = \frac{1}{2} \overrightarrow{BC} = \overrightarrow{PC} \Rightarrow \overrightarrow{OC} = \overrightarrow{OP} + \overrightarrow{MN}$$

$$\overrightarrow{NP} = \frac{1}{2} \overrightarrow{AB} = \overrightarrow{MB} \Rightarrow \overrightarrow{OB} = \overrightarrow{OM} + \overrightarrow{NP}$$

$$\overrightarrow{PM} = \frac{1}{2} \overrightarrow{CA} = \overrightarrow{NA} \Rightarrow \overrightarrow{OA} = \overrightarrow{ON} + \overrightarrow{PM}$$