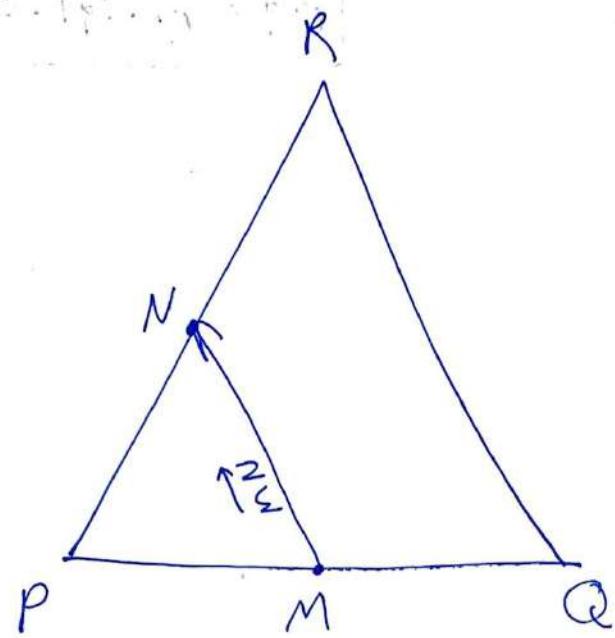


3)



$$M = \frac{P+Q}{2}$$

$$N = \frac{P+R}{2}$$

$$\vec{MN} = N - M$$

$$\vec{MN} = \frac{\vec{P} + \vec{R}}{2} - \frac{\vec{P} + \vec{Q}}{2}$$

$$\vec{MN} = \frac{\vec{R} - \vec{Q}}{2}$$

$$\vec{QR} = \vec{R} - \vec{Q}$$

$$\frac{1}{2} \cdot \vec{QR} = \vec{MN}$$