

Έχουμε

$$\begin{aligned}\overrightarrow{A\Delta} + \overrightarrow{B\Gamma} + \overrightarrow{\Gamma Z} &= \overrightarrow{AB} + \overrightarrow{B\Delta} + \overrightarrow{B\Gamma} + \overrightarrow{\Gamma\Gamma} + \overrightarrow{\Gamma\Gamma} + \overrightarrow{\Gamma A} + \overrightarrow{AZ} = \overrightarrow{AB} + \lambda \overrightarrow{B\Gamma} + \overrightarrow{B\Gamma} + \lambda \overrightarrow{\Gamma A} + \overrightarrow{\Gamma A} + \lambda \overrightarrow{AB} = \\ &= \overrightarrow{AB} + \lambda \overrightarrow{B\Gamma} + \overrightarrow{B\Gamma} + \lambda \overrightarrow{\Gamma A} + \overrightarrow{\Gamma A} + \lambda \overrightarrow{AB} = (\overrightarrow{AB} + \lambda \overrightarrow{AB}) + (\lambda \overrightarrow{B\Gamma} + \overrightarrow{B\Gamma}) + (\lambda \overrightarrow{\Gamma A} + \overrightarrow{\Gamma A}) = \\ &= \overrightarrow{AB}(1 + \lambda) + \overrightarrow{B\Gamma}(1 + \lambda) + \overrightarrow{\Gamma A}(1 + \lambda) = (1 + \lambda)(\overrightarrow{AB} + \overrightarrow{B\Gamma} + \overrightarrow{\Gamma A}) = (1 + \lambda)\overrightarrow{AA} = \vec{0}\end{aligned}$$