

Pb 14 Find the parametric equations of the line through $P(-5, 2)$ and parallel to $\vec{v}(\hat{2}, \hat{3})$.

The vector eq. of this line is equal to $\vec{r}_M = \vec{r}_P + \lambda \vec{v}$, $\lambda \in \mathbb{R}$ (*)

We denote by x, y the coordinates of the generic point M on the requested line. Its vector eq. (*) is \Rightarrow to the following

$$\text{system of equations: } \begin{cases} x = -5 + \lambda \cdot 2 \\ y = 2 + \lambda \cdot 3 \end{cases}, \lambda \in \mathbb{R}.$$

These are the parametric equations of the requested line.